APPLIED BUSINESS FINANCE

BOOKS BY
EDMOND E. LINCOLN

Applied Business Finance

Testing Before Investing

Problems in Business
Finance

Steps in Industry

The Results of Municipal
Electric Lighting in
Massachusetts

Central Electric Light
and Power Stations, 1917
(U. S. Census Report)

APPLIED BUSINESS FINANCE

BY

EDMOND E. LINCOLN

Economist, International Telephone and Telegraph Corporation; Formerly Chief Statistician and Economist, Western Electric Company, Incorporated; Sometime Assistant Professor of Finance, Graduate School of Business Administration, Harvard University

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PREFACE

THERE are few really new things under the sun, though there may be many new ways of interpreting apparently familiar facts. The most important discoveries are usually made in the best known fields and are merely the result of a patient and constructive examination of the data which have long been accessible to all, but the significance of which has not been fully appreciated.

There would be little justification in writing one more book on the subject of business finance did not the author hope to present some new material and to survey from a somewhat different angle a considerable portion of the more commonly studied problems of finance.

The aim of this book is to discuss those problems of business finance which actually arise from day to day in the *average* industrial concern, including both manufacturing and trading enterprises. No attempt is made to center attention on the problems of very large organizations as such, and only incidental mention is made of the financial problems of public utility concerns and holding companies. Little attention is given to the abnormal or spectacular and more public phases of financing.

Since the financial problems of business are very definitely linked up with the changes in the Business Cycle, much attention is given to the lessons which may be learned from the experiences of the past few years. Further, the problems of financing are regarded as the most vital problems of any business, and hence are studied in their relation to the problems of original construction, purchase, production, distribution, and consumption of goods. Important aspects of investment banking, commercial banking in its vital relations, as well as costs and marketing problems, are given careful attention. The most recent financial developments are noted and analyzed.

Throughout, the point of view aimed at is that of the thoughtful, conservative, and thoroughly successful business man. Though frequent statistical information is given in order to lend support to the general discussion, the text is not burdened with routine details. Rather, the aim is to stress those underlying principles of finance which have stood the test of the best practice and which have been heartily endorsed by leaders in the business world. Naturally, therefore, the long time outcome of various financial policies rather than their immediate results is constantly kept before the reader. Conclusions are drawn from the first hand study of innumerable concrete cases.

Cambridge, Mass., August, 1922.

Note to Second Edition—The first edition of this book was exhausted so soon that it has been neither possible nor generally necessary to make many changes in the second edition. A number of obvious errors of a typographical sort have been corrected.

New York City, March 19, 1923.

Preface to Third Edition—When the first edition of this book was in preparation, some three or four years ago, the author was very much in the position of a pioneer, both in the point of view presented and in the work of assembling a large part of the material used. It is gratifying to find, however, that business men who must daily grapple with concrete problems of finance, as well as many teachers of economics, have whole-heartedly endorsed this new and somewhat more comprehensive method of dealing with business finance. Discussion has been created and further investigation by others has been stimulated, with a consequent improvement in the profession of business. The author himself has had a rather unique opportunity during the past few years to practice directly what he preaches in *Applied Business Finance*—and the test

of exacting practical experience has confirmed his original point of view as to the scope of the science of finance.

In the third edition many changes in statistics and in phraseology have been made in order to bring the book completely up to date wherever the usefulness of the figures depends on their timeliness. New tabular material has been introduced and many passages have been revised throughout. Practically all of Chapter I, "Business Finance and the Business Cycle," has been re-written in the light of concrete experience. It is hoped that in its new form the book will perform an increasingly useful service.

New York City, June 19, 1925.

Preface to Fourth Revised Edition—To a student of finance, the last decade has been worth living through. Even during the past six or seven years many striking changes and developments have taken place, and many business men and others have apparently shifted their point of view on vital questions. Among other things, attention may be called to the following:

1. Few of the men who headed our large corporations in 1920 are now in control. Along with new personnel has probably come more scientific management. The most successful concerns in recent years have usually been those which have given most attention to research, planning, budgeting, and personnel administration.

2. There has been a rapid growth of intelligent cooperation in industry, leading to improved methods, as opposed to ignorant competition. Trade association activities have tended to become more scientific and businesslike, and upon the whole business practises have probably grown more ethical. The United States Government, through the Department of Commerce, has directly and indirectly cooperated with the more than 9,000 commercial and industrial associations and organi-

zations in order to bring this about. The United States Chamber of Commerce, with affiliated organizations, has also done much to put business operations on a higher plane.

3. There has been a remarkably rapid increase in the professional study of business problems. Through frequent meetings of technical, business, and banking associations, as well as through various business and financial publications and periodicals, helpful ideas have been disseminated to an extent quite unknown in other countries or in earlier periods.

4. Partially as a result of the above mentioned conditions, efficiency in leading productive industries is estimated to have increased on the average about one-third as compared either with 1919 or 1921. Much of the increase has gone to the worker in the form of higher wages, at a time when the cost of living has been steady to downward. The worker's increase in purchasing power has further stimulated production—particularly of luxuries and semi-luxuries.

5. Great new industries have developed with spectacular rapidity, such as the automobile and accessory industries, the chemicals, rayon, radio, and various electrical industries. On the other hand, many of the great old industries, until a few years ago considered basic, such as cotton and woolen textiles, leather, sugar, oil, shipping, and paper, have in many instances not yet fully recovered from the debacle of 1921.

6. Many foreign problems which seemed well-nigh insoluble only a few years ago have now been measurably settled. Practically all important nations are again on a gold currency basis, and many seem to be on the road to rapid industrial recovery. In the future they may have relatively less need for American capital and American goods. The great foreign markets may for a time exert a powerful influence, not always bullish, on our domestic industrial development and finance.

7. Several years ago a number of mergers were formed in order to relieve financial distress. Now, with boom psychology at its height and with new financing uncommonly easy, many combinations are being proposed and effected which probably have no financial or economic justification. Yet, in spite of this tendency toward mergers, the number of smaller business units

is also increasing, so that the average size has shown little change during the past decade.

8. The merger movement among *banks* has recently been very noticeable. Also, it was formerly a much mooted question as to whether commercial banks should extend their functions much beyond that of financing the current needs of temporary business borrowers. Very rapidly, however, the point of view has apparently changed. Our commercial banks are becoming more closely allied with business and investment activity throughout the world. Many of the important banks now have investment subsidiaries, and a number are more or less affiliated with investment trusts.

This tendency to centralize financial power in fewer and stronger hands, and the attendant interlocking of functions, may create some new and serious problems for the average business borrower. If intelligently and unselfishly exercised, this new banking power can greatly improve the plane of business operations; otherwise such power could result in some of the well known evils of monopoly control.

9. During the last few years of unprecedented prosperity, the distribution of ownership in corporations has been rapidly expanding. Employees, customers, and other small investors, have bought stock in industrial and public utility companies to such an extent that in the aggregate they are a force to be reckoned with in business financing. Probably this wide ownership has tended to restrain public regulatory bodies from that type of interference in private management and financing which, until recently, was thought to be somewhat too common.

10. For several years following the world war most all new financing was by means of bonds or preferred stock. Gradually, however, following the heavy issue of convertible bonds and bonds with stock purchase warrants, a strong sentiment has been developing on the part of investors in favor of common stocks. In 1928, the tide of industrial financing turned heavily in favor of common stock—frequently at unwarrantedly high prices compared with present or prospective earnings. Bonds are being paid off, bank loans liquidated, and expansions and mergers effected, with common stock issues. This is a

splendid policy from the company point of view, and in the long run will make for strength in the financial situation; but probably the ultimate shareholder may have considerable "indigestion" during the period of readjustment in values which almost inevitably follows financial inflation.

11. After several years of great prosperity, accompanied by no major general price changes, with large volume, relatively low costs, and easy financing, many of the larger companies have recently had an extraordinary excess of free working capital. Therefore, instead of borrowing as formerly from banks, or issuing commercial paper, they are now competing with the banks in making call loans to be used for stock market speculation ("bootlegger" loans).

12. The country is now at the height of possibly the greatest stock market boom in modern industrial history. Notwithstanding the apparently easy credit position of most business concerns, interest rates during the past year have rapidly advanced to the highest point reached preceding the crash of 1920. Coincident with this spectacular increase in the cost of money, the prices of many industrial and public utility common stocks have continued to advance to so high a point that the yields are far below the return on high grade bonds, notwithstanding the fact that economic signs point to little if any increase in earnings within the reasonably near future. Not many years ago the same stocks would have been considered high at half their present prices. On the other hand, many railroad stocks, with stable and long demonstrated earning power, have shown little appreciation in price.

13. Finally, there is talk of a "new economic era," and many have apparently convinced themselves that the "Business Cycle," so much discussed a few years ago, is a thing of the past. Some believe that business has now been largely stabilized through scientific control and superior knowledge of the facts. And it must be admitted that in certain industries and companies much progress has undoubtedly been made in this direction.

Some economists are now arguing along with sales managers in favor of selling consumers' goods on the installment

plan. This practise has even been regarded as a means of strengthening the general industrial situation, whereas only a few short years ago such an anticipation of personal income was, with apparently sound logic, thought to be the height of economic folly. Some believe that stock prices in general cannot fall much below recent levels, because investors will be content with much lower yields than in the past. And so on, *ad infinitum.* "Nothing succeeds like success," and, upon the whole, all trends have been pretty definitely upward, with few serious reversals, since 1921.

All in all, this "new era" talk is little different from that which has always accompanied great booms and speculative manias back to the time of John Law. However, both the stock market and money market signals have for some time been set at "danger." Human nature changes very little in only one decade!

While on the surface business seems very sound, it may be that in this particular "cycle" inventories have accumulated in the hands of *consumers,* instead of in producers' stocks. These inventories may be in the new form of automobiles and radios bought on the installment plan, houses financed by liberal credit margins, and stocks bought at inflated prices.

Although there is much talk of increasing national income, it is significant to note that there has really been little advance in the *physical volume* of production since 1923 and 1925. *Paper profits,* however, have increased at an unprecedented rate, as shown by the fact that the market price of stocks listed on the New York Stock Exchange increased about 43 per cent between January 1, 1928, and February 1, 1929 (from $49,736,000 to $71,060,000).

We have been passing through a period of economic readjustment following the great crash of 1920-1921. Probably the financial recovery has gone a bit too far, just as the recession was overdone. No doubt after a few years, equilibrium will be restored at a level considerably above the old estimated "normal" level of business activity, but also somewhat below present spectacular financial heights. In the meantime, it can

do no harm to keep sight of some of the old landmarks. There has probably been no fundamental change in the old simple rules of the financial game.

In this *Fourth Edition,* the text has been thoroughly revised and in many places completely re-written. An attempt has been made to give proper weight to all the important developments in finance which have taken place within the past few years. Because of the great importance of the subject at this time, a supplementary chapter has been added on "The Prospectus and Its Analysis" (Chapter XXVI).

A large part of the statistical material is new—much of it not elsewhere available. Whenever possible, and always when the most recent figures show significant changes, 1928 data have been included in the tables. Otherwise, the latest data available have been used. Also, a number of additional useful tables for reference have been included in an Appendix.

An attempt has been made to profit by the criticisms and suggestions which have been received during the past years, so as to make the presentation less dogmatic and more practical and useful for business men, bankers, and accountants, as well as for students and general readers.

Finally, the author feels that he owes a heavy debt to his business friends, associates, and employers, with whom, particularly during the past decade, he has had an opportunity to consider, and frequently to work out in a practical way, many of the problems herein discussed.

E. E. L.

New York City, March 20, 1929.

NOTE TO TENTH PRINTING

In the *"Preface to Fourth Revised Edition"* written about a year ago, some mention was made of the "new era" psychology then prevailing, and certain dangers in the situation were indicated. Within about seven months the inevitable cataclysm came late in October. The prices of securities and of many commodities soon fell with almost unprecedented rapidity, and business activity before the end

of the year had dropped to depression levels. Employment and payrolls declined rapidly to the lowest levels in many years. Unusual measures were taken by the government and private interests in order to prevent panic.

In the meantime, raw material inventories have increased rapidly, and in many cases were recently at a record high point. Prices in general are again back to the lowest point following the 1920–1921 crash—in fact, the United States Bureau of Labor wholesale price index is now as low as in the latter part of 1916. Retail prices and the cost of living, however, have not yet deflated. Business and financial failures have again made new high records. Short time money rates in the United States, and central bank discount rates in many countries, approached new peace-time high records in 1929. But the rates have recently declined rapidly along with the stock market deflation.

Nor has the United States alone been affected. The long-continued boom and the following depression have been more or less world-wide. In 1928 and 1929 money from other countries was drawn into the New York speculative market. United States loans to foreigners almost ceased, and United States exports are now sharply off. Leading foreign countries became involved in financial difficulties and serious private credit stringencies. Even the gold standard was threatened or temporarily suspended in several important countries. Rarely has so violent a speculative mania gripped any industrial country, and rarely has the subsequent break been so sudden and violent.

All in all, within scarcely a decade we have apparently witnessed another major "business cycle," notwithstanding attempts made to stabilize production and improve the plane of business activity. The "old" financial problems of an earlier period have become "new" problems of today. The general economic background is again in many respects comparable to the situation which existed when the first edition of APPLIED BUSINESS FINANCE was being written.

E. E. L.

New York City,
March 31, 1930.

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"STUDY the past if you would understand the present and divine the future." A careful analysis of past performances, both good and bad, and a real knowledge of essential facts is the first step toward a mastery of those few salient principles which must be followed in order to insure success.

In the long run the supreme test of the success of a business is the financial test. It is becoming more clearly recognized that there can be no sound financing without attentive consideration of all phases of business operation, and the relation of these operations to economic conditions. A large proportion of the financial blunders of the past can be attributed to the ignorance and incompetence of those who have attempted to decide major policies without a clear understanding of the significance of their own decisions. It is dangerous to think in air-tight compartments.

"The year 1920 will be the biggest and best in the history of our organization," said the sales manager of a well-known concern which manufactures a staple commodity. "We must greatly increase our purchase of raw materials before prices rise still higher," replied the purchasing agent. The production manager agreed that in view of this favorable outlook

there should immediately be an expansion in plant capacity which would enable the company to keep pace with consumers' demand for their product. "Watch collections more closely, cut down purchases to a small proportion of normal, and curtail factory expenses wherever possible," ordered the veteran president of this concern. He immediately became the most unpopular man in his organization. It is scarcely necessary at this time to indicate whose forecast was correct, though it was a most difficult question to deal with at the opening of 1920.

The years 1920 and 1921 are almost without parallel in business annals. Price readjustments in many lines of industry came with such rapidity that no one could accurately have predicted their severity. For example, the best calfskins dropped from 80 cents per pound in January, 1920, to 15 cents in December of the same year. Crude rubber, the price of which had been tending downward for some years, suddenly slumped from 41 cents or more per pound, in 1920, to about 18 cents in 1921. The price of cotton dropped from more than 40 cents per pound in the early part of 1920 to as low as 12 or 15 cents within a year's time. The price of wool shrank from $1.10 in April, 1920, to 45 cents at the end of the year. Electrolytic copper, which sold as high as 37 cents per pound near the end of the war period, could at most any time in 1921 be bought for 12 or 13 cents. Wheat, which commanded a price of $3.06 per bushel in May, 1920, could a year later be purchased at less than half this figure, while sugar, bought at 22 cents per pound in May, was worth less than 5 cents in December. Many other prices slumped in like manner. Two or three years earlier, prices in general were rushing upward, though not with equal rapidity.

In view of the situation indicated, it is not surprising to find an unprecedented number of business failures in the United States. These failures were naturally most numerous in the year 1921 and the early part of 1922. One of the leading mercantile agencies reported 20,014 failures in 1921 with total liabilities amounting to $756,000,000, while for 1922 the same agency reported 22,415 failures with liabilities amount-

ing to $650,000,000. These were record figures, but failures have been almost equally high in succeeding years.

Further, it should be borne in mind that the large number of failures actually reported is relatively insignificant when compared with the far greater number of financial difficulties and involvements under which business concerns were laboring during this time. Many a business has actually failed and ceased operation without the fact being recorded by any credit reporting agency, since its affairs have not passed through the bankruptcy courts or been publicly noticed. There are countless additional concerns which, after suffering severe losses, have been reorganized and continue to operate. Again, many large and really powerful companies during this period incurred tremendous deficits in operation which in the aggregate far exceeded the reported liabilities of all businesses which failed. Even in the very prosperous year 1926, 197,186 corportations, or about 43.3 per cent of the total number reporting to the United States Commissioner of Internal Revenue, returned an aggregate deficit of $2,168,710,302—but in 1921, 185,158, or about 52 per cent, reported an aggregate deficit of $3,878,000,000. It has been conservatively estimated that this depression caused a loss of at least $6,000,000,000 in the national income.

Finally, this period led to even more important losses which can scarcely be measured in a financial way. When scores of large concerns pass their dividends it is natural to say that the stockholders have merely foregone some millions of their income. When, however, these stockholders are widely distributed, and include not only people of small means not connected with the industry, but also numerous employees of the concern itself, the intangible losses resulting from disappointment, worry, and physical strain are incalculable. It is a particularly serious situation when old established and supposedly conservative concerns, whose preferred stock has been regarded as a prime investment, find themselves unable to meet their dividends. From another point of view, also, there are immeasurable economic losses resulting from an industrial situation which makes it possible for enterprises to

lose in one or two bad years the millions of surplus which have been built up over a long period of time.

Particularly significant is the fact that many concerns which reported wholly satisfactory earnings for the year 1920, and which were able to add to their surplus after having declared the usual dividends, incurred such heavy losses in the following year that not only were dividends passed, but also previous surpluses were frequently turned into deficits on their annual statements of condition. It is really gruesome to find that many companies which expected the greatest business in their history during 1920, and planned their operations accordingly, were a year later struggling to keep out of the receiver's hands. The business optimist of 1920 was frequently forced to attend his own funeral by the end of 1921. Men who were carried away by prosperity and admired as business giants in one year, found themselves ousted from their positions of authority and without employment only 12 months later.

During this period, also, there was a large volume of "new" financing at high rates. Upon examination it will be found that in the year 1921 practically all industrial security issues were in the form of first mortgage bonds or notes with very drastic protective provisions. This condition was a complete reversal of that which existed only a year or two earlier. Many a concern was forced to issue first-mortgage bonds in order to pay off its bank loans, the alternative being a friendly or perhaps a somewhat unfriendly receivership.

It is not difficult to see why industrials were forced to finance themselves in this way, if one will take the trouble to glance at the 1921 statements of some of the leading commercial banks. Many a prominent New York bank found it necessary to write off losses of millions of dollars at the end of the year. Whether or not these losses were in some way concealed, the fact still remains that they were incurred during a period when interest rates were abnormally high. A computation made by a leading financial paper indicates that all the national banks in one of the largest cities of the United States, during the year 1921 earned in the aggregate considerably less than one-

hundredth of one per cent, or $7,914, on their capital stock, surplus, and undivided profits, which amounted to about $90,000,000. This was only *two-hundredths of one per cent on the capital stock.* This showing is contrasted with earnings of nearly 25 per cent on the capital stock in the preceding year. Obviously, therefore, the banks suffered along with their borrowers. It will be interesting at a later point to examine whether the banks were responsible for the unfortunate financial position of their borrowers, or whether the causal relation was in the reverse order. It will also be worth while to attempt to discover whether, as has been alleged by many, "general business conditions" accounted for the loss mutually incurred. However, it is well to bear in mind that during this time bank failures were unusually common, and many a bank "merger" merely served to cover an additional failure. The same statement would also apply to many industrial concerns.

A comparison of different industrial companies during the year 1921 indicates that, while there were many failures and disappointments, yet there were to be found many outstanding examples of financial success. This would not be an altogether significant state of affairs were the successful concerns engaged in a type of industry differing materially from that carried on by the companies incurring heavy losses. When, however, of two well-known concerns engaged in the same line of business, one finds the year 1921 the most prosperous in its history while the other incurs its heaviest losses during the same period, the problem presented becomes of more than passing interest.

For example, the General Motors Corporation, which reported a profit of $37,000,000 in 1920, returned a deficit of nearly $39,000,000 at the end of 1921, or $65,000,000 after dividends were paid! The Studebaker Company, on the other hand, reported for the latter year a profit of more than $10,000,000, which was the largest of any year in its history. During the same year, the Endicott-Johnson Corporation, one of the largest maker of shoes in the world, reported excellent earnings and a plant running to full capacity. Not many months before, however, one of this company's largest rivals

was forced to transfer its entire business to a competing concern in order to avoid bankruptcy. The Central Leather Company, which reported at the end of 1919 a surplus of $30,-000,000, within 18 months wrote in its place a deficit of $10,000,000. During a similar period, a somewhat smaller leather company not only avoided losses, but made very satisfactory profits. The Woolworth Company had a record year in 1921, with earnings of more than $20 per share, while the Sears-Roebuck Company reported a loss of nearly $16,500,000, still further increased by the payment of dividends. At the middle of the year the stock of the Amoskeag Manufacturing Company was selling at the highest point on record and the plant was operating at full capacity, while many other cotton mills were practically idle and threatened with bankruptcy.

A closer study of the situation discloses the fact that such reasons as the following played a very important part in the recent financial debacle.

In the first place, for nearly twenty years prices had been slowly rising. Then for four or five years they rose still higher with almost unprecedented rapidity. It was easy to forget that prices might some time drop, and that values were dangerously inflated. Volume in *dollars* totally obscured volume of *goods*. For example, it is estimated that from 1914 to 1920 the foreign trade of the United States increased between 200 and 300 per cent in *value*, but probably not more than 50 per cent in *quantity* of goods imported and exported. Yet very few men, even in the banking fraternity, foresaw the disasters which might result to traders and manufacturers when the inevitable readjustment between prices and commodities would come, and when foreign trade would return to its normal channels.

Mistaking present values for permanent values, and nourished on a constant diet of rising prices, it was, perhaps, to be expected that the average business man would mistake book profits for *real* profits. This error resulted in the reckless expansion of fixed assets at the most unwise time, and led to the further accumulation of inventory. Receivables were regarded as the equivalent of cash, and merchandise as even

more desirable than money, because of its probable appreciation, at a time when in reality the general business structure was tottering. It was easy to follow the mob at a time like this, and to try to do all the business possible in order to reap supposedly bigger profits.

It is also significant to note that most of our business organizations are comparatively young. Few have been in operation for more than one generation. Their active management has, in probably the majority of cases, been in the hands of middle-aged men who obtained their knowledge of finance during a period of rising prices, when it was comparatively easy to make profits. The memory of few went back to the troubled period of 1893 or to the years of falling prices which followed. The average "prosperous" business man tended to become a rather bumptious, fair-weather bird, without too much regard for the somewhat limited financial experience of the generations which had gone before. Yet there is a certain amount of business acumen which can come only by experience, except in those rare cases in which the individual is gifted with more than ordinary horse sense. It is rather interesting, therefore, to find that most of those concerns which came safely through the storm were established long ago. Their management had an opportunity to benefit by the lessons of the past.

"No one could have foreseen the catastrophe of 1920," argued the cultured, forty-year-old vice-president of a well-known bank. His personally inherited and matrimonially acquired business interests were extensive, his war-time profits were all that could be wished, and his recent losses were too severe to be comfortable. "The recent period of falling prices and business depression following a boom is not much different from preceding periods," asserted an uneducated tobacco importer on the same day. He had been in the business more than 50 years. High prices did not excite him. His war-time profits were moderate, but he suffered no bad post-war losses.

Further, many a concern put too much faith in a management whose reputation had never been tried by adversity. Di-

rectorates composed of men successful in one line of enterprise, but unfortunately ignorant of the detailed business of other concerns to whose boards they were elected, tended to let their names rather than their abilities represent them. Their interests became so scattered that attention could properly be centered nowhere. In the meantime, labor, definitely organized and aggressive, exerted every effort to secure the highest possible wage, while efficiency constantly decreased. Success in one line of business enterprise is by no means a guaranty of success in some new field.

On the other hand, the business definitely controlled by one responsible man, no matter what its form of organization, usually found itself in a much happier position when the crisis came than the concern managed by the committee of some "all-star" directorate. Also, that large business fared best in which management and ownership were not too widely separated.

Finally, it is significant that the immediate difficulties of all failing concerns are credit difficulties. The too liberal use of credit facilities in periods of rapidly rising prices is dangerous in the extreme. Most of those companies which came safely through the recent shoals were, to put it mildly, niggardly in their use of available credit. Thus they have strengthened their most valuable asset by not using it!

PHENOMENA OF THE BUSINESS CYCLE

The various situations above discussed are characteristic of certain phases of the so-called "business cycle"—a term scarcely known to the business man until after the end of the World War when the economist began to popularize its use. The words merely describe the industrial conditions which have been observed over a long period of years, in accordance with which, at frequently recurring intervals periods of prosperity are followed by periods of depression, the severity of the deflation being measured roughly by the height of the preceding inflation. The time required to pass through the various stages of depression, recovery, prosperity, and subsequent collapse, constitutes a *cycle* in business affairs.

During such a period the prices of the various items which enter into the cost of finished goods are affected in different manner and degree. The wages of labor normally tend to increase more slowly than the prices of the goods produced. The price of raw materials tends to fluctuate more rapidly than the price of fashioned goods. Wholesale prices tend to advance or decline more rapidly than retail prices. Whether in a period of rising or falling prices, the prices of different groups of commodities move in an irregular fashion, and security prices usually fluctuate more widely than commodity prices. The situation is well summed up in the following statement:

"(1) Retail prices rise less promptly and less considerably than the wholesale prices of the same commodities; (2) the wholesale prices of finished products lag behind the wholesale prices of the same commodities in a partially manufactured state, and the latter prices in turn lag behind the prices of the corresponding raw materials; (3) the wholesale prices of manufactured consumers' goods rise perhaps more promptly, but certainly less considerably than the wholesale prices of manufactured producers' goods; and (4) the wholesale prices of raw mineral products respond to changes in business conditions with greater certainty and greater accuracy than do the wholesale prices of raw farm, animal, or forest products."[1]

On the upward swing, business profits tend to be large, because of the lag in some of the important costs of production, particularly in the so-called "overhead" or "supplementary" costs—the *fixed charges* of a business, such as interest, rent, depreciation, upkeep, general office expenses, and the like, which do not fall below a fairly definite limit when production is curtailed and which do not as a rule rapidly increase as the volume of production grows. Among the so-called *prime* costs of production, those costs which are incurred only in connection with the actual production of goods, the lag in wages has in the past been of great significance in its effect upon profits, as well as the slower adjustment of short-time interest rates on loans contracted for carrying materials and supplies. Due to immigration restrictions, better organization, and an extraordinarily high standard of living, the customary

[1]Mitchell, *Business Cycles*, page 461.

"lag" in wages has not recently been so pronounced as in earlier years.

The volume of sales of retail stores frequently throws a good deal of light on the general trend of business conditions. When the sale of staples increases it is evident that economic and financial pressure is not being so keenly felt by the mass of people. On the other hand, the excessive sale of luxuries may be a distinct danger signal which should not be unheeded by the producer. However, it sometimes happens that luxuries tend to take the place of necessities over a considerable period of time. For example, it has been estimated that for the year 1920 the sale of automobiles and accessories amounted to nearly $3,500,000,000, which was just about equivalent to the estimated value of the housing shortage during the same period. When the sale of luxuries and non-essentials is curtailed, however, there is no question about the generally depressed condition in industry.

It is further a well-recognized fact that the movement in the volume of production of commodities may anticipate by a considerable period of time the apparent changes in general business conditions. This happens in spite of the fact that many concerns now make their goods to order. Orders which were thought "firm" are frequently canceled when the financial situation becomes ominous, while in the case of those concerns which manufacture for "stock" a period of many months may elapse between the original factory process and the placing of the goods in the hands of the ultimate consumer, depending upon the nature of the industry involved. During the 1920-21 period of depression the low point in production was generally reached in July, 1921, while a year later many of the leading industries were operating at a rate close to normal capacity.

Finally, it is very significant to note that, as prosperity increases, not merely do the wages of labor tend to rise, but there is a distinct pressure brought by labor to reduce the daily hours of work. Coupled with this tendency is the inevitable curtailment of efficiency as the laborers begin to feel more independent as a result of the strong demand for their services.

This inefficiency of labor is further increased by overtime work, and by the frequent number of strikes, which almost invariably increase as the crest of prosperity is reached. While there will always be a marked difference of opinion on matters of fact relating to this situation, it is probably true that the curtailment of the hours of labor beyond a certain point leads to decreasing production and hence higher costs. When prosperity ebbs, on the other hand, after a time the worker, eager to hold his job, is usually more energetic in his application to the task. Then labor unrest results from an attempt to maintain the *status quo* rather than to secure further concessions.

It should be apparent from the foregoing suggestions that, because of changing conditions, a financial policy which is apparently safe at one time may be most unwise or even suicidal under other circumstances. Further, it is evident that not all industries will be affected in the same way at the same time by fluctuations in general business conditions. Much will depend upon the nature of their costs and the character of their markets. Each industry will, in a sense, have its own *cycle*. Therefore, even at the same time, it may be most unwise to finance two different types of business in a similar manner.

BUSINESS FORECASTING

It may now be asked whether the enormous economic losses resulting from the inevitable period of liquidation which follows hard on the heels of inflated prosperity, can in some way be prevented. Cannot some theory be deduced from a study of the facts which will enable unfavorable conditions to be forecasted and their effects to be minimized? What changes if any, can be made in our industrial and financial mechanism which will prevent these violent fluctuations?

The answer to the first question is clear. Most financial losses result from the lack of knowledge of fundamental business conditicns and the economic principles underlying them as applied to a particular business. Hence it would seem that there should be at least two definite methods for alleviating the difficulty. First, based upon definite study of various im-

portant factors, tentative forecasts of business conditions can be made, which will prove of general value to all business concerns provided they are properly used. Secondly, many larger concerns have developed their own corps of experts, whose function it is to study the problems peculiar to their own industry, as affected by the changes in general business conditions. For the smaller business units, perhaps the banks may act with mutual profit as constructive advisers regarding the problems of their own business cycles.

What has been done along the lines of the first suggestion? Numerous attempts have been made to construct business barometers, none of which have hitherto proved to be of unquestioned dependability. During the past few years practically all of the "prophets" who pin their faith to one or two mechanical forecasting lines have gone wrong at critical times. No chart or series of charts can take the place of balanced judgment on the part of the executive. Each cycle has its own peculiar characteristics, which make it somewhat different from other cycles in duration and intensity. Each industry has its own peculiar problems—frequently not conforming closely in its swings to the "average" or "general" business movement. Each group of commodities also has its own seasonal and cyclical price movements to which careful attention must be given if profits are to be made.

Some of the manifold difficulties encountered in business forecasting are well pointed out by Professor Wesley C. Mitchell, a well-known student of the subject, in his book on *Business Cycles:*

"The deepest-seated difficulty in the way of framing such a theory arises from the fact that while business cycles recur decade after decade each new cycle presents points of novelty. Business history repeats itself, but always with a difference. This is precisely what is implied by saying that the process of economic activity within which business cycles occur is a process of *cumulative* change.

"It follows that a thoroughly adequate theory of business cycles, applicable to all cases, is unattainable. Even if some

one cycle could be fully accounted for, the account would necessarily be inaccurate with reference to cycles which were the outgrowth of earlier or of later conditions. Nor are all the differences between the successive cycles of one country and between the contemporary cycles of several countries differences in minor detail. Even such an elementary matter as the order in which the phases of business cycle succeed one another is not invariable. A revival of business activity does not always develop into prosperity—sometimes it relapses into depression." [1]

* * * * * *

"Thus there is no certain way of predicting when business will begin to recover from a prevailing depression. Only by compiling a composite record of numerous factors, and endeavoring to establish their general trend, can an intelligent guess be made. The whole business situation is so full of cross-currents and uncertainties at this stage of the cycle that forecasts are subject to a much wider margin of error than after the cumulation of prosperity has begun."[2]

Notwithstanding the difficulties of economic forecasting, the chief job of the major financial executive is to anticipate the future and to reach sound conclusions speedily, selecting relevant material from the mass of more or less organized information available at the time. Primarily, the task is one of judgment and the balancing of probable gains against possible losses which may result from following a specific policy.

While the exact time of major turns in business cannot always be seen and while the exact relation to "normal" cannot invariably be predicted, yet safe limits can usually be ascertained and the most favorable time for specific action can ordinarily be determined through a study of those economic sequences which have customarily held true in the past.

SOME ECONOMIC SEQUENCES OF FINANCIAL SIGNIFICANCE

The number of sequences in the movement of various statis-

[1]Mitchell, *Business Cycles,* page 449.
[2]*Ibid.*, page 457.

tical series is legion. Some of these sequences almost invariably hold true from cycle to cycle, while others are frequently influenced by unpredictable and more or less unmeasurable causes. Political conditions may accelerate or retard business movements, but they rarely have the pronounced effect attributed to them by popular opinion.

In the past such generally observed sequences as the following have been useful in studying financial policies. None of these, however, should be considered absolute as to the time interval, nor have they always held good in the post-war period, which has led to many profound changes in the credit structure and in buying habits.

1. The production of basic commodities tends to reach its peak somewhat ahead of the wholesale price peak.

2. The stock market usually reaches its peak a little before the peak in production.

3. When 60- to 90-day paper reaches a point about 1¼ per cent over the preceding low point *during a period of rise* in the stock market, it is usually a good time to sell stocks.

4. Commercial paper rates in the pre-war period usually reached their maximum about four or five months after the high point of prices.

5. Comparatively low commercial paper rates have ordinarily prevailed until about a year and a half after the low point in pig-iron production. However, a rise in the interest rate usually precedes a peak in the stock market.

6. General prices in the past have usually turned definitely down several months after the down-turn in the stock market.

7. Bank clearings usually tend to reach their maximum several months before a price peak is reached.

8. Bond prices tend to rise during a period of depression (that is, interest rates fall), and high grade bonds tend to reach their peak sometime before the stock market peak.

9. The lowest points in the cyclical movement of bond yields lag behind similar points for commercial paper rates. This lag apparently varies from one to twelve months.

10. Usually the peak of bond yields and 60- to 90-day commercial paper rates coincide. That is, the low point of bond prices will come about the same time as the high point of commercial paper rates.

11. From the high point to the low point of commercial paper rates a period of one year to one year, six months usually elapses.

12. From the high to the low point of bond yields a period of one year, six months to two years is frequently found.

13. Bond prices tend to reach their high point about fourteen or fifteen months after the low point in pig-iron production.

14. Stock prices have ordinarily reached their high point about two years after the low point of pig-iron production.

15. The price of finished goods tends to lag behind the price of raw materials, both on the upward and on the downward swings.

16. Normally, wages have lagged behind prices, but this pre-war sequence seems to have been substantially modified in recent years.

17. Full productive activity is usually followed by increasing labor difficulties which in turn increase costs and prices, thus leading to a break in business prosperity.

18. In general, the upward swings in business activity are usually longer and more gradual than the downward swings.

19. The time elapsing below the so-called normal line is usually less than the time above the line.

20. The more gradual and moderate the upward swing of the cycle, the less severe is the downward swing.

21. Rather clearly defined minor cycles of business activity seem in the past to have recurred at intervals of three to four years, the average period being about forty months. Such averages, however, are in danger of being misleading and they should not be taken too seriously, nor are all business cycles the same in movement or in intensity.

Cyclical movements must, through careful study and charting of data, be distinguished from long-time trends and from seasonal variations. Some industries (*e.g.*, pig iron) formerly correlated closely with the general "business cycles," while others are much more erratic, for instance, leather and fertilizer. For effective business control each industry must be studied separately in order to discover its relation to the general movement, and sweeping conclusions must be avoided.

In interpreting such economic relationships as are suggested above, it is particularly important to remember that the present period following the World War with its almost immeasurable destruction of capital and human life is in many respects wholly different in its setting from any other period which we have known. Economic principles have not changed, but results may have to be worked out under a different combination of conditions. This may alter the time sequence of certain relationships. For example, short-time money rates during the past few years seem to have become a negative rather than a positive forecaster of business conditions, due to the vast accumulation of gold in the United States and the enormous volume of potential credit created by our Federal Reserve

System. After a period of some uncertainty, however, it would not be surprising to see the old sequences again established.

If, as seems distinctly possible, we are at the threshold of a long period of slowly declining prices, whatever the temporary movement may be, business will probably spend more time near the so-called "normal" line than formerly, and on each up-swing the advance may be less pronounced. Competition will unquestionably be keener and profits harder to realize. The wages of labor will not readily "deflate," though labor will gradually become more efficient.

On the other hand, the more intelligently business is planned, the more probable it is that we shall have comparatively mild fluctuations above and below the estimated normal activity.

It is also possible that our trend of population growth will change, due to conditions resulting from the war, as well as to the effect of our greatly improved standard of living. Luxuries of yesterday become the comforts of today and the necessities of tomorrow. This may lead to some marked changes in the old trend lines and in the timing of economic relationships which have hitherto served as the basis of reasonably accurate forecasting.

THE WORK OF THE ECONOMIST

Misapprehension as to the exactness of the various phases of the so-called "business cycle," and as to the possibility of minutely correct forecasts based on cycle studies, has perhaps caused a few business men to expect the impossible and to repudiate the entire theory because it cannot possibly do for them as much as they erroneously expect. On the other hand, some pseudo-economists have tried to purvey wholly unscientific advice based on a superficial exploitation of some of the truths which careful students of business phenomena have discovered. However, the science of business is new, and whenever a science is new there will be many quacks; but the truths of science live on in spite of their misapplications.

While there were a number of unfortunate experiences in

the period immediately following the war, the work of the economist in business may now be said to have passed the experimental stage. Sound finance and sound economics must always go hand in hand. Business is becoming more and more a profession and not a game of chance. No business is so strong or so well managed but that it can be improved in many vital respects.

The "business economist" or "statistician," in order to do his work effectively, must master the facts of his business and must build upon the work of the accountant, the engineer, and the salesman. He must take a comprehensive view of the various functions and departments of the entire organization and must study their interrelationships with a view to making larger profits for the company or improving the service at the same or lower costs. Internal performance must be related to external business conditions. The study of one is ineffective without the study of the other.

The principal job of the economist, therefore, is that of forecasting the future of business and the future of his own industry. Through a judicious interpretation of facts he must reach conclusions as to correct administrative and financial policy. His function is to help level the peaks and fill up the valleys in business. Perhaps the test of the value of his services is the non-fulfilment of his prophecies, due to the fact that the concern which he advises, by taking thought in time, avoids the disasters which have been foreseen.

While there will always be human uncertainties to reckon with, business should be just as scientific as many of the learned professions. Whatever the present situation may be, it is absolutely certain that in the future business financing will more and more be based on facts rather than "hunches." *Knowledge* is essential to judgment. To foreknow the evil is to prevent it—provided one has the courage of his convictions. The old adage that sound business financing means to follow the best course available at the time, must be changed to "follow the best course available at the *best* time." Thus the losses attendant upon business fluctuations can be greatly reduced.

STABILIZING BUSINESS

Although the memory of man is short and the lessons of the past tend to be forgotten, yet there is reason to believe that attempts to control the fluctuations of business through careful planning ahead may in the future appreciably modify the nature of our cyclical fluctuations. Such steps as the following, long urged by economists and recently advocated by the President's Conference on Unemployment, are now being seriously considered, and some progress seems already to have been made in anticipating the probable swings of business so as to avoid disasters and minimize changes:

1. More fundamental business data are being collected through the United States Department of Commerce, the Department of the Interior, and the Department of Labor, as well as through various research organizations and trade associations. This makes it possible, through intelligent cooperation and analysis of facts, to forecast many business movements more accurately than ever before.

2. Both in private industries and in research organizations much progress has been made in analyzing in a scientific manner all pertinent economic data, and *putting the results of these analyses to definite use in the control of business.*

3. Business men have recently been more cautious in their expansion policy, both in plant construction and in sales campaigns.

4. Some definite attempts have been made to restrict public and private building construction at the peak of business activity, so as to avoid bidding up the price of material and labor.

5. Employment statistics have been more generally collected and have served to warn industry of an approaching crisis due to labor shortage.

6. No doubt the banks have been far more zealous than at earlier periods in their study of fundamental economic conditions as related to the business of their borrowers. However, it is yet to be seen whether credit granting will in the future be put on so sound a basis, both by the Federal Reserve banks and by our leading commercial banks, that reckless financing will be prevented.

Finally, the writer believes that the proper control of credit is the very heart of the problem of regulating business cycles. It should again be stated that all immediate financial difficulties are *credit* difficulties. There were probably few, if any, well-defined business cycles before the 19th century when the modern credit system began to be developed. Whatever crises and panics may have been experienced in earlier

days were usually the result of politics, wars, pestilence, or manias of some sort. The more advanced the credit economy the more frequent seem to be the periodic fluctuations from prosperity to depression. Our improved banking system may minimize financial panics, but it appears to have small effect on industrial crises.

Evidently, therefore, the extensive use of credit is largely responsible for the cyclical changes in industry. The abuse of credit, beyond a doubt, has been responsible for untold financial ills. It is not desirable or possible to revert to the condition of several generations ago, before the development of commercial banking. However, it may be wise to remember that credit is most liberally used by those who least appreciate or understand its functions. The overuse of credit whether by producers or consumers of goods may enable expenditures to outrun income, and may dangerously reduce the margin of safety essential to financial success. Accordingly, in various places in the following text further reference will be made to the proper uses of *credit—the power to command present goods or money in exchange for the promise of a future equivalent.* Attention will also be given to those methods which have been successfully used by various concerns in order to reduce the fluctuations in their business.

During the past few years, industrial efficiency, as measured by volume of output per unit of labor, has advanced to new high levels. Capital, both in plant and in materials, has been turned over more rapidly than in the past. It is not surprising, therefore, that there has been an almost uninterrupted stock market boom from 1922 until the early part of 1929. However, it is probable that future values have been over-discounted, and reactions from present levels of industrial and stock market activity are certain to come in due time. Notwithstanding our seemingly unprecedented prosperity, more than 40 per cent of our business corporations each year fail to make profits and incur huge deficits. While business upon the whole is being more scientifically conducted than ever before, thousands of new concerns are organized each year which must learn the same old lessons of management and finance, based on the experience of the past.

CHAPTER II

THE AVERAGE INDUSTRIAL CONCERN—ITS NORMAL PROBLEMS

The importance of the small industrial unit—Relative size of corporations in the United States—Relative importance of different types of industry—The financial position of the smaller business—Financial problems of public utilities and industrials contrasted—Less standardization possible in industrial enterprises—The financial importance of public utilities—Essential differences between industrial concerns themselves—Classification of industrials—Financial problems of the average industrial concern—The point of view adopted.

IT has been traditional for text-book writers to discuss corporation finance in its broader aspects rather than business finance as it applies to the normal problems of the average business concern. Because of the exceptionally rapid industrial development of the United States it has no doubt been natural for writers and readers to be interested primarily in the more spectacular phases of industrial finance and the financial history and methods of the larger aggregations of capital. No other country in the world can boast of such tremendous organizations as the United States Steel Corporation, the General Motors Corporation, the American Telephone and Telegraph Company, and many other concerns of comparable size and financial strength.

However, all of these large industrial units have grown from small beginnings, and the great majority of businesses have been, are, and doubtless always will be relatively small. Hence it now seems worth while to direct attention to those financial problems which are common to all types of industrial concerns whether large or small, rather than to stress particularly the policies and problems of the giant corporations and holding companies.

At this point it is significant to note that, according to the census figures for the year 1914, 98.6 per cent of the total

number of manufacturing concerns in the United States reported an annual value of product less than $1,000,000. In other words, only 3,819 manufacturing establishments out of a total of 275,791 reported an annual value of product in excess of $1,000,000. Nearly 65 per cent of the wage earners were employed by the smaller concerns. In fact there were at the time only 648 establishments employing more than 1,000 wage earners. At the same period 87.7 per cent of all manufacturing established reported by the Census Bureau, showed an annual value of product less than $100,000 (Table 1).

The striking changes which seem to have taken place in the size of manufacturing concerns during the five-year period, 1914-1919, are rather abnormal and due largely to the influence of inflated prices and war-time conditions. The year 1919 was a time of unusual over-expansion. In the census taken two years later a far different condition was revealed. The average number of wage earners per establishment increased less than 25 per cent from 1914 to 1919. From 1919 to 1925, for manufacturing concerns having an annual output in excess of $5,000, the average number of employees increased little more than 5 per cent (from 50 to 52.6), following an increase of less than 9 per cent from 1914 to 1919, and the average value of product increased about 15 per cent (from $289,000 to $335,000. See Table 2*a*.) Also, the average gross income of *all* manufacturing *corporations* actually decreased more than 10 per cent during this period (from $770,000 to $690,000), while their number increased about 30 per cent (from 67,852 to 88,674)! Between 1919 and 1927 the number of separate corporations in the United States has probably increased at least 50 per cent. Although there has recently been much talk about mergers, new business units are formed even more rapidly than the old ones disappear, and preliminary figures indicate that the average manufacturing concern was a little smaller in 1927 than in 1925. According to Bradstreet's estimates, the number of separate business units increased about 22 per cent between 1919 and 1927.

According to the *Statistics of Income* for 1919, only 7,483 business corporations out of a total of 192,037 with clearly indicated invested capital, reported an investment in excess of

TABLE 1

Manufacturing Concerns in the United States Classified According to Size

Value of Product	Establishments		Wage Earners		Value of Products		Value Added by Manufacture	
	Number	Per Cent Distribution	Average Number	Per Cent Distribution	Amount	Per Cent Distribution	Amount	Per Cent Distribution
All Classes:								
1919	290,105	100.0	9,096,372	100.0	$62,418,078,773	100.0	$25,041,698,490	100.0
1914	275,791	100.0	7,036,337	100.0	24,246,434,724	100.0	9,878,345,893	100.0
1909	268,491	100.0	6,615,046	100.0	20,672,051,870	100.0	8,529,260,992	100.0
1904	216,180	100.0	5,468,383	100.0	14,793,902,563	100.0	6,293,694,753	100.0
Less than $5,000:								
1919	65,485	22.6	45,813	0.5	$167,085,044	0.3	$106,653,362	0.4
1914	97,061	35.2	129,623	1.8	233,381,081	1.0	151,739,764	1.5
1909	93,349	34.8	142,430	2.2	222,463,847	1.1	144,246,008	1.7
1904	71,147	32.9	106,353	1.9	176,128,212	1.2	114,781,124	1.8
$5,000 to $20,000:								
1919	87,440	30.1	249,722	2.7	945,602,857	1.5	539,698,109	2.2
1914	87,931	31.9	429,037	6.1	905,693,168	3.7	507,430,875	5.1
1909	86,988	32.4	470,006	7.1	904,645,664	4.4	509,907,934	6.0
1904	72,791	33.7	419,466	7.7	751,047,759	5.1	424,129,643	6.7
$20,000 to $100,000:								
1919	77,911	26.9	793,528	8.7	3,571,283,301	5.7	1,747,729,538	7.0
1914	56,814	20.6	999,600	14.2	2,550,229,411	10.5	1,238,879,430	12.5
1909	57,270	21.3	1,090,449	16.5	2,544,426,711	12.3	1,258,317,991	14.8
1904	48,096	22.2	1,027,047	18.8	2,129,257,883	14.4	1,090,271,887	17.3
$100,000 to $1,000,000:								
1919	48,956	16.9	2,834,776	31.2	15,443,227,140	24.8	7,035,589,748	28.1
1914	30,166	10.9	3,002,071	42.7	8,763,070,135	36.1	3,888,094,982	39.4
1909	27,824	10.4	2,896,532	43.8	7,946,935,255	38.4	3,572,746,038	41.9
1904	22,246	10.3	2,515,064	46.0	6,109,012,538	41.3	2,782,641,883	44.2
$1,000,000 and over:								
1919	10,413	3.6	5,172,533	56.9	42,290,880,431	67.8	15,612,027,733	62.3
1914	3,819	1.4	2,476,006	35.2	11,794,060,929	48.6	4,092,200,842	41.4
1909	3,060	1.1	2,015,629	30.5	9,053,580,393	43.8	3,044,043,021	35.7
1904	1,900	0.9	1,400,453	25.6	5,628,456,171	38.0	1,881,870,216	29.9
Average per establishment:								
1919	......	......	31.4	......	$215,200	......	$86,350	......
1914	......	......	25.5	......	87,916	......	35,818	......
1909	......	......	24.6	......	76,993	......	31,767	......
1904	......	......	25.3	......	68,433	......	29,113	......

TABLE 2

Manufacturing Concerns Grouped by Average Number of Wage Earners, 1919 and 1914[1]

Wage Earners per Establishment	Number of Establishments		Wage Earners (Average Number)		Per Cent of Total: Establishments		Per Cent of Total: Wage Earners	
	1919	1914	1919	1914	1919	1914	1919	1914
All establishments	290,105	275,791	9,096,372	7,036,247	100.0	100.0	100.0	100.0
No. wage earners	37,934	32,856	....	....	13.1	11.9	....	....
1 to 5 wage earners	141,742	140,971	311,576	317,216	48.9	51.1	3.4	4.5
6 to 20 wage earners	56,208	45,379	631,290	606,609	19 4	19.7	6.9	8.6
21 to 50 wage earners	25,379	22,932	829,301	742,529	8.7	8.3	9.1	10.6
51 to 100 wage earners	12,405	11,079	888,344	791,726	4.3	4.0	9.8	11.3
101 to 250 wage earners	10,068	8,470	1,581,763	1,320,972	3.5	3.1	17.4	18.8
251 to 500 wage earners	3,599	3,108	1,250,875	1,075,108	1.2	1.1	13.8	15.3
501 to 1,000 wage earners	1,749	1,348	1,205,627	926,828	0.6	0.5	13.3	13.2
Over 1,000 wage earners	1,021	648	2,397,596	1,255,259	0.4	0.2	26.4	17.8

[1]Abstract of the Census of Manufacturers, 1919, page 355.

TABLE 2*a*

Statistics of Manufacturing Concerns with Value of Products Over $5,000, 1914-1927
(*Value Unit: $1,000*)

Year	Number of Establishments	All Employed (including proprietors)	Salaries and Wages	Cost of Materials	Value of Products	Value Added by Manufacture	Horse Power
1927*	(191,863)	....	....	($35,128,154)	($62,713,947)	($27,585,793)	(39,032,014)
1925	187,390	9,857,697	$13,887,298	35,935,648	62,713,714	26,778,066	35,772,628
1923	195,580	10,266,508	14,000,272	34,480,854	60,258,471	25,777,616	33,056,870
1921	195,555	8,251,166	10,744,139	25,154,807	43,427,224	18,272,417	Not reported
1919	213,631	10,668,679	13,316,950	36,988,876	61,737,125	24,748,249	29,297,963
1914	176,468	8,102,819	5,328,734	14,161,897	23,837,258	9,675,361	22,264,343
Average per establishment:							
1927*	....	....	....	($183)	($327)	($144)	(203)
1925	....	52.6	$74	192	335	143	190
1923	....	52.5	72	176	308	132	169
1921	....	42.2	55	129	222	93	Not reported
1919	....	49.9	62	173	289	116	137
1914	....	45.9	30	80	135	55	126

*Preliminary.

TABLE 3

Corporations Reporting Invested Capital Distributed by Size of Invested Capital, Calendar Year 1919

Invested Capital Class	Number	Invested Capital (Unit: $1,000)	Net Income (Unit: $1,000)	Average Net Income	Average Tax	Per cent of Net Income to Invested Capital	Per Cent of Total Tax to Net Income
Under $500	741	$160	$611	$825.18	$63.53	382.75	7.70
$500 to $1,000	1,277	834	1,066	834.53	50.26	127.83	6.02
$1,000 to $2,000	4,045	5,290	4,683	1,157.75	97.22	88.53	8.40
$2,000 to $3,000	4,299	10,194	5,138	1,195.18	66.48	50.40	5.56
$3,000 to $4,000	3,787	12,640	5,086	1.343.03	72.52	40.24	5.40
$4,000 to $5,000	3,120	13,717	5,009	1,605.41	113.93	36.52	7.10
$5,000 to $6,000	6,182	32,233	10,633	1,720.04	126.60	32.99	7.36
$6,000 to $7,000	3,565	22,679	6,781	1,902.01	131.50	29.90	6.91
$7,000 to $8,000	3,058	22,793	6,524	2,133.57	161.91	28.62	7.59
$8,000 to $9,000	2,849	23,919	6,564	2,303.80	192.32	27.44	8.35
$9,000 to $10,000	2,555	24,147	6,566	2,569.99	244.09	27.19	9.50
$10,000 to $11,000	7,893	80,375	23,535	2,981.79	494.95	29.28	16.60
$11,000 to $12,000	2,764	31,680	8,243	2,982.31	336.41	26.02	11.28
$12,000 to $13,000	3,603	44,661	10,659	2,958.48	336.47	23.87	11.37
$13,000 to $14,000	2,568	34,636	8,531	3,322.12	368.07	24.63	11.08
$14,000 to $15,000	2,425	35,119	8,151	3,361.07	382.00	23.21	11.37
$15,000 to $20,000	13,286	226,258	47,828	3,599.91	421.14	21.14	11.70
$20,000 to $25,000	11,097	244,132	49,108	4,425.38	628.22	20.12	14.20
$25,000 to $30,000	10,793	290,620	52,907	4,901.95	728.41	18.20	14.86
$30,000 to $40,000	14,837	566,799	102,341	6,897.68	1,146.87	18.06	16 63
$40,000 to $50,000	9,772	434,346	78,350	8,017.78	1,528.15	18.04	19.06
$50,000 to $60,000	9,702	522,171	86,813	8,947.95	1,757.65	16.63	19.64
$60,000 to $70,000	6,338	408,259	71,129	11,222.66	2,376.21	17.42	21.17
$70,000 to $80,000	4,982	373,660	64,407	12,927.86	2,885.53	17.24	22.32
$80,000 to $90,000	3,878	328,797	57,467	14,818.84	3,405.72	17.48	22.98
$90,000 to $100,000	3,395	322,204	57,579	16,959.99	4,071.93	17.87	24.01
$100,000 to $150,000	13,380	1,610,129	270,300	20,201.80	4,929.43	16.79	24.40
$150,000 to $200,000	6,784	1,168.054	209,336	30,857.30	7,928.07	17.92	25.69
$200,000 to $250,000	4,912	1,092,012	190,640	38,810.98	30,079.55	17.46	25.97
$250,000 to $300,000	3,316	903,253	155,346	46,847.28	12,114.30	17.20	25.86
$300,000 to $400,000	4,443	1,530,818	281,342	63,322.60	17,240.53	18.38	27.23
$400,000 to $500.000	2,761	1,230,124	232,892	84,350.45	23,050.93	18.93	27.33
$500,000 to $750,000	4,107	2,534,217	457,801	111,468.46	30,144.12	18.06	27.05
$750,000 to $1,000,000	2,040	1,758,460	312,533	153,202.25	40,402.86	17.77	26.37
$1,000,000 to $1,500,000	2,385	2,880,691	518,925	217,578.68	59,568.91	18.01	27.38
$1,500,000 to $2,000,000	1,184	2,030,790	369,002	311,657.45	85,032.65	18.17	27.28
$2,000,000 to $3,000,000	1,290	3,150,372	539,472	418,195.40	113,424.66	17.12	27.12
$3,000,000 to $4,000,000	639	2,205,998	354,961	555,494.31	149,398.21	16.09	26.89
$4,000,000 to $5,000,000	411	1,831,024	264,178	642,768.24	165,239.78	14.43	25.71
$5,000,000 to $10,000,000	785	5,446,057	816,451	1,040,064.39	267,798.26	14.99	25.75
$10,000,000 to $20,000,000	418	5,763,030	812,996	1,944,966.75	441,478.24	14.11	22.70
$20,000,000 to $30,000,000	132	3,172,131	408,643	3,095,780.09	736,547.20	12.88	23.79
$30,000,000 to $40,000,000	71	2,464,755	243,390	3,428,022.13	648,811.17	9.87	18.93
$40,000,000 to $50,000,000	39	1,730,964	192,791	4,943,350.48	1,052,141.21	11.14	21.28
$50,000,000 to $60,000,000	16	863,110	99,478	6,217,358.69	1,215,660.81	11.53	19.55
$60,000,000 to $70,000,000	23	1,418,626	141,868	6,168,194.69	979,530.00	10.00	15.88
$70,000,000 to $80,000,000	16	1,205,799	111,196	6,949,780.56	1,375,487.94	9.22	19.79
$80,000,000 to $90,000,000	10	826,251	75,884	7,588,406.90	1,328,351.30	9.18	17.50
$90,000,000 to $100,000,000	10	960,955	88,486	8,848,640.80	1,390,572.90	9.21	15.71
$100,000,000 and over	54	14,240,409	1,372,149	25,410,169.79	4,546,439.13	9.63	17.89
Total	192,037	66,130,351	9,305,769	48,458.21	11,259.60	14.07	23.24
Invested capital not clearly indicated	17,597	....	105,648	6,003.78	743.38	.....	12.38
Total reporting net income	209,634	....	9,411,418	44,894.52	10,376.85	.....	23.11
Reporting no net income	110,564	....	*995,546	....	....	.....	.....
Grand Total	320,198	....	8,415,872	....	....	.....	.....

*Deficit.

TABLE 4

ALL CORPORATIONS—DISTRIBUTION BY SIZE OF NET INCOME AND BY INDUSTRIAL GROUPS, 1925

Net Income Class (*Dollars*)	All Corporations		Agriculture and Related Industries		Mining and Quarrying		Manufacturing		Construction		Transportation and Other Public Utilities		Trade		Public Service—Professional, Hotels, Theatres, etc.		Finance		All Others	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Under 2,000	108,447	42.98	2,382	51.09	2,481	45.21	17,756	32.80	3,985	41.08	8,313	55.93	29,823	41.48	8,819	53.22	33,749	46.08	1,139	64.83
2,000 to 5,000...	51,334	20.35	911	19.55	752	13.70	9,346	17.26	2,342	23.12	2,291	15.42	17,069	23.74	3,099	18.70	15,375	20.99	248	14.11
5,000 to 10,000..	29,067	11.52	512	10.98	485	8.84	6,318	11.67	1,186	12.22	1,280	8.62	9,174	12.76	1,642	9.91	8,359	11.41	111	6.32
10,000 to 25,000..	29,533	11.70	477	10.23	628	11.44	7,785	14.38	1,170	12.06	1,254	8.44	8,467	11.77	1,544	9.33	8,080	11.03	128	7.28
25,000 to 50,000..	13,965	5.53	209	4.49	369	6.72	4,537	8.38	505	5.21	544	3.66	3,553	4.94	708	4.28	3,486	4.76	54	3.07
50,000 to 100,000.	9,249	3.67	87	1.87	322	5.87	3,447	6.37	336	3.46	391	2.63	2,081	2.89	408	2.47	2,142	2.92	35	1.99
100,000 to 250,000.	6,270	2.48	62	1.33	242	4.41	2,742	5.06	198	2.04	323	2.18	1,167	1.62	226	1.36	1,284	1.75	26	1.48
250,000 to 500,000.	2,200	.87	11	.24	97	1.77	1,061	1.96	49	.51	161	1.08	331	.46	70	.42	408	.56	12	0.68
500,000 to 1,000,000	1,156	.46	5	.11	44	.80	604	1.12	22	.23	112	.75	145	.20	27	.16	196	.27	1	.06
1,000,000 to 5,000,000	917	.36	5	.11	56	1.02	446	.82	6	.06	139	.94	88	.12	26	.16	148	.20	3	.17
5,000,000 and over..	196	.08	1	.02	12	.22	95	.18	1	.01	54	.36	12	.02	2	.01	19	.03	......	.....
Total..........	252,334	100	4,662	100	5,488	100	54,137	100	9,701	100	14,862	100	71,910	100	16,571	100	73,246	100	1,757	100
Reporting no net income...........	177,738		5,242		13,675		34,537		5,637		8,751		37,678		12,410		42,701		3,563	
All returns.....	430,072		9,904		19,163		88,674		15,338		23,613		109,588		28,981		115,947		5,320	.....
Proportion without net income.......	41.33%		52.93%		71.35%		38.95%		36.75%		37.06%		34.38%		42.82%		36.83%		66.97%	

$1,000,000. Of this group, 5,909 returned an investment under $5,000,000. In this same year only 1,239 business corporations earned a net income in excess of $1,000,000, and in 1925 only 1,113 were in this class! One year later the number had decreased further to only 1,097, or less than one-fourth of one per cent of all corporations—and 1926 was a very prosperous year! These and other facts are presented in Table 3 and Table 4.

Though averages tend to be misleading, it is interesting to note the relative amounts of invested capital reported for the different types of corporations. These figures are presented in Table 5, and should be closely studied, along with the averages given in Table 1. The average capital invested in all manufacturing concerns whether incorporated or unincorporated was $153,000 in 1919. Even these investment figures are probably much inflated because of war-time conditions. They show unmistakably, however, that the average manufacturing enterprise employs a relatively small amount of capital. In other lines of industry, when unincorporated concerns have been included, the average would be very much lower than this amount. No investment figures, however, are available for the miscellaneous unincorporated groups.

In Table 6 is shown the percentage distribution of corporations according to the general nature of business carried on. The three most numerous groups are manufacturing, trading, and finance; the two latter, and personal service concerns, having increased very rapidly in the last few years. These four account for 80 per cent of all business corporations in the United States. A comparison of these figures with those presented in Table 7 will indicate clearly the extent of the tendency toward incorporation in the different lines of industry. Obviously, by far the larger proportion of trading, agricultural, and personal service concerns are unincorporated.

In this table also is shown the relative proportion of business corporations of all sorts which actually made money in 1925. More than 41 per cent were operated at a loss as compared with less than 35 per cent in 1919. In relative number of companies earning a profit, the most prosperous industries in 1925 were paper and pulp, printing and publishing, and trading, in each of which about two-thirds report a net income. For

the year 1919, however, the most prosperous industries were leather and leather products, textile and textile products, in both of which close to 90 per cent of all companies earned a net income.

It is significant to find in this connection that those groups of concerns which were most prosperous in 1919 were almost without exception hardest hit in 1920 and 1921. On the other hand, attention may be called to the fact that the least prosperous groups, from the numerical standpoint, both in 1919 and in 1925, were mining and quarrying, agricultural and related industries, rubber and rubber goods. The number of corporations in these groups reporting net income, was in 1925 below 55 per cent of the total. The chemical companies made a relatively poor showing at both periods.

Finally, upon comparing these numerical proportions with the figures presented in Table 5, it is apparent that almost without exception those groups of companies which showed the highest proportion of separate establishments earning net profits during the year, also earned the highest percentage of net income to invested capital. The leather and textile groups stood first in both regards in 1919, while the the trading group and food products companies ranked near the top.

It is again significant to note that by far the larger number of businesses of all sorts are unincorporated. For example, in 1914 only 28.3 per cent of all manufacturing concerns in the United States were incorporated,[1] and the percentage had increased to only 31.5 in 1919, in spite of the influence of the income tax laws. According to figures published by the United States Treasury Department the number of business concerns under different forms of ownership changed as follows from 1919 to 1925:

Type of Ownership	*1919*	*1925*
Individual Businesses (with net income)	1,124,385	978,792
Partnerships (with net income)	180,656	309,414
Corporations (all business)	320,198	430,072
Total	1,625,239	1,718,278

However, because of more liberal exemptions for individuals and unincorporated enterprises at the latter period, these figures considerably understate the facts. For the year 1927 preliminary estimates indicate that there may now be about

[1] See Table 8, page 62.

TABLE 5

Corporations Reporting Invested Capital Distributed by Industrial Groups, Calendar Year 1919

Industrial Groups	Number	Invested Capital	Invested Capital per Company (Unit = $1,000)	Net Income	Per Cent of Net Income to Invested Capital	Per Cent of Total Tax to Net Income
Agriculture and related industries	4,011	$ 763,001,652	$ 191	$ 93,040,085	12.19	20.55
Mining and quarrying:						
Coal mining	1,518	$ 1,175,891,538	$ 773	$ 98,912,336	8.41	17.84
Metal mining	373	443,920,553	1,190	72,192,392	16.26	12.69
Gas and oil	1,091	1,589,427,593	1,445	197,946,304	12.45	19.47
All other mining and quarrying	1,726	1,032,171,676	600	61,326,268	5.94	15.43
Total mining and quarrying	4,708	$ 4,241,411,360	$ 900	$ 430,377,300	10.15	17.38
Manufacturing:						
Food products, liquors, and tobacco	8,484	$ 2,550,966,167	$ 300	$ 618,403,458	24.24	24.30
Textile and textile products	7,062	3,269,686,969	463	911,336,029	27.87	29.92
Leather and leather products	1,548	794,374,746	512	240,559,203	30.28	30.76
Rubber and rubber goods	379	671,117,655	1,770	126,280,705	18.82	23.26
Lumber and wood products	5,216	1,675,612,626	322	283,952,142	16.95	23.50
Paper and pulp products	1,195	741,566,766	616	128,633,939	17.35	23.19
Printing and publishing	5,192	642,853,168	124	127,182,958	19.76	24.65
Chemicals and allied substances	3,097	2,807,053,310	906	450,348,512	16.04	24.44
Stone, clay, and glass products	2,190	748,114,349	340	106,788,815	14.27	22.83
Metal and metal products	9,280	10,126,360,716	1,090	1,788,471,333	17.65	25.55
All other manufacturing industries	5,273	2,163,958,788	410	427,827,023	19.77	25.70
Total manufacturing	48,916	$26,191,665,260	$ 535	$5,209,784,117	19.89	26.03

Construction	5,233	$ 603,833,976	$ 115	$ 154,528,376	25.59	41.78
Transportation and other public utilities:						
Steam railroads	291	$ 8,646,237,303	$29,710	$ 413,495,792	4.78	10.51
Electric railroads	235	691,441,493	2,942	28,402,342	4.11	11.21
Ocean lines, transoceanic and coastal	95	264,252,749	2,782	61,997,033	23.46	28.78
All other transportation	6,329	1,360,638,644	215	127,569,527	9.38	18.92
Electric light and power companies	1,046	761,548,949	725	49,734,661	6.53	11.84
Gas companies	287	159,367,485	550	9,670,801	6.07	12.57
Telephone and telegraph companies	2,060	1,170,691,424	558	82,110,582	7.01	10.47
All other public utilities	2,222	1,793,327,923	808	174,888,909	9.75	14.13
Total transportation and other public utilities	12,565	$14,847,505,970	$1,180	$ 947,869,647	6.38	13.61
Trade	54,296	$ 7,158,955,264	$ 132	$1,420,989,486	19.85	25.51
Public service—Professional, amusements, hotels, etc	10,983	891,492,027	81	121,394,339	13.62	19.86
Finance, banking, insurance, etc.:						
Banks, general, not precisely defined, or private bankers	8,272	992,309,501	120	107,233,032	10.81	11.15
National banks	6,732	3,154,855,325	470	253,933,769	8.05	13.66
State banks	7,309	348,553,843	48	48,566,512	13.93	10.90
All other banking	22,866	4,430,531,798	193	297,705,857	6.72	12.82
Life insurance, stock and mutual companies	71	134,769,398	1,900	2,375,209	1.76	9.88
Accident, fire, and marine, stock and mutual companies	361	512,873,434	1,424	49,450,035	9.64	14.74
All other insurance companies	1,408	805,991,415	572	57,738,205	7.16	15.29
Total finance, banking, insurance, etc.	47,019	$10,379,884,714	$ 221	$ 817,002,619	7.87	13.03
Combinations, predominant industry not ascertainable	4,177	$ 1,030,040,510	$ 245	$ 109,434,119	10.62	23.60
Concerns in liquidation	97	20,673,884	213	1,210,599	5.86	17.67
Inactive concerns	32	1,886,531	59	139,267	7.38	10.42
Total reporting invested capital	192,037	$66,130,351,148	$ 344	$9,305,769,954	14.07	23.24

TABLE 6

Distribution of Corporations by Industrial Groups and by Percentage Reporting Net Income, Calendar Year 1925

(Value Unit: $1,000)

Industrial Group	Total Number of Corporations	Per Cent Distribution	Corporations Reporting Net Income: Number	Per Cent of Total Reporting	Gross Income: Amount	Gross Income: Per Cent Distribution	Gross Income: Average per Corporation	Deductions	Net Income: Amount	Net Income: Per Cent Distribution	Net Income: Average per Corporation	Net Income: Per Cent of Gross Income
Agriculture and related industries	9,904	2.3	4,662	47.1	$572,215	.5	$124	$495,353	$76,862	0.8	$16	13.3
Mining and quarrying	19,163	4.6	5,488	28.6	3,711,407	3.3	678	3,257,807	453,600	4.5	83	12.2
Manufacturing:												
Food products, beverages, and tobacco	14,722	3.4	9,303	63.2	$11,476,443	10.1	$1,234	$10,942,970	$533,472	5.6	$57	4.6
Textiles and products, other than clothing	5,479	1.3	3,359	61.3	3,840,208	3.4	1,143	3,544,332	295,876	3.1	88	7.7
Clothing	6,792	1.6	4,145	61.0	2,267,852	2.0	549	2,150,613	117,239	1.2	28	5.2
Total textiles and textile products	12,271	2.9	7,504	61.2	6,108,060	5.4	814	5,694,945	413,115	4.3	55	6.7
Leather and leather products	2,359	0.6	1,373	58.2	1,175,340	1.0	855	1,099,317	76,023	0.8	55	6.5
Rubber and rubber goods	638	0.1	349	54.7	1,373,495	1.3	3,936	1,250,529	122,966	1.3	352	8.9
Lumber and wood products	7,633	1.8	4,657	61.0	2,380,463	2.1	511	2,180,147	200,316	2.1	43	5.3
Paper, pulp, and products	1,940	0.5	1,288	66.4	1,260,563	1.1	979	1,149,377	111,186	1.2	87	8.8
Printing and publishing	9,920	2.3	6,523	65.8	1,988,485	1.7	321	1,797,576	190,909	2.0	29	9.6
Chemicals and allied substances	6,962	1.6	3,951	56.8	6,475,024	5.7	1,639	5,851,746	623,277	6.5	158	9.6
Stone, clay, and glass products	4,454	1.0	2,753	61.8	1,345,032	1.3	489	1,163,485	181,547	1.9	66	13.4
Metal and metal products	21,529	5.0	12,760	59.3	17,335,348	15.2	1,359	15,578,595	1,756,753	18.3	138	10.1
All other manufacturing industries	6,246	1.5	3,676	58.9	2,006,742	1.7	546	1,832,949	173,792	1.8	47	8.7
Total Manufacturing	88,674	20.6	54,137	61.0	$52,924,994	46.6	$976	$48,541,637	$4,383,357	45.8	$81	8.3
Construction	15,338	3.6	9,701	63.3	$1,914,494	1.7	$197	$1,758,004	$156,491	1.6	$16	8.2
Transportation and other public utilities	23,613	5.5	14,862	62.9	10,952,508	9.7	738	9,483,816	1,468,693	15.3	99	13.3
Trade	109,588	25.5	71,910	65.6	32,617,032	28.9	454	31,362,986	1,254,046	13.1	17	3.8
Public Service—Professional, amusements, hotels, etc.	28,981	6.7	16,571	57.2	2,283,168	2.0	138	2,036,741	246,426	2.6	15	10.8
Finance, banking, insurance, related business, etc.	115,947	26.9	73,246	63.2	8,503,186	7.6	116	6,979,363	1,523,823	15.9	21	17.9
All other concerns	5,320	1.2	1,757	33.0	213,079	0.2	121	192,693	20,386	0.2	12	9.4
Nominal concerns (inactive and nature of business not given)	13,544	3.1	....	....	....	....	....	....	....	....	....	....
Grand Total	430,072	100.0	252,334	58.7	$113,692,083	100.0	$449	$104,108,400	$9,583,684	100.0	$38	8.4

TABLE 7

Individual Income from Business—Number of Returns and Net Profit by Industrial Groups, Calendar Year 1925[1]

Industrial groups—Individual businesses	Number of businesses reported	Per cent	Net Profit from Business		
			Amount	Per cent distribution	Average per return
Agriculture and related industries	82,968	8.48	$250,061,291	6.78	$3,014
Mining and quarrying	4,604	.47	25,432,264	.69	5,524
Manufacturing:					
Food products, beverages, and tobacco	19,392	1.98	$67,025,175	1.82	$3,456
Textiles and textile products	11,901	1.22	49,520,152	1.34	4,161
Leather and leather products	3,547	.36	10,349,681	.28	2,918
Rubber and rubber good	610	.06	2,062,510	.06	3,381
Lumber and wood products	3,089	.32	14,384,098	.39	4,657
Paper, pulp, and products	531	.05	2,314,043	.06	4,358
Printing and publishing	9,345	.95	35,406,484	.96	3,789
Chemicals and allied substances	1,425	.15	8,462,321	.23	5,938
Stone, clay, and glass products	2,732	.28	12,512,607	.34	4,580
Metal and metal products	12,744	1.30	48,630,782	1.32	3,816
All other manufacturing industries	3,426	.35	17,137,284	.46	5,002
Total manufacturing	68,742	7.02	$267,805,137	7.26	$3,896
Construction	60,436	6.17	$246,794,194	6.69	$4,084
Transportation and other public utilities	26,531	2.71	84,080,350	2.28	3,169
Trade	366,916	37.49	1,217,319,011	33.00	3,318
Public service—professional, amusements, hotels, etc.	287,553	29.38	1,223,867,164	33.18	4,256
Finance—banking, insurance, etc.	37,784	3.86	221,566,771	6.00	5,864
Special cases, business not sufficiently defined to be classed with any other division	43,258	4.42	151,878,281	4.12	3,511
Grand total	978,792	100.00	$3,688,804,463	100.00	$3,769
Partnerships	309,414	......	$1,827,025,490	......	$5,900

[1]Adapted from *Statistics of Income, 1925*, page 8.

500,000 business corporations in the United States, or between 20 per cent and 25 per cent of all business units.

For another very good reason it is well to bear in mind the financial problems of the *average* business concern. The statement has sometimes been made that about 90 per cent of all trading concerns launched with a capital of less than $5,000 sooner or later fail. This is perhaps an exaggeration, and the facts might be rather difficult to prove. It is true, however, that a very considerable number of the small business undertakings fail to justify their existence. According to the annual figures compiled by Bradstreet's agency, practically all business failures are confined to concerns whose capital is less than $1,000,000. Even in the disastrous year 1921 only seven businesses with a capital in excess of $1,000,000 failed, while the failures in the group having $5,000 capital or less amounted to 19,730, or 88.1 per cent of the total number of failures for

the year. Only 1.1 per cent of those which failed in 1921 had a capital in excess of $50,000. That the failures are particularly numerous in trading establishments is indicated by Dun's figures for the year 1928, which show the number of failures in this class to be 16,477, with average liabilities of $13,700. These figures may be contrasted with only 5,924 failures among manufacturers, with average liabilities of $30,800.[1]

FINANCIAL PROBLEMS OF PUBLIC UTILITIES AND INDUSTRIALS CONTRASTED

Many writers on the general subject of finance have drawn their materials largely from the public utility and railroad fields. In the earlier days it was of course easier to make satisfactory financial studies of this group of concerns than of the less generally known and wholly unstandardized industrial undertakings. Beyond a doubt, there are certain fundamental principles of finance which may apply equally well to these different kinds of business. However, there is a grave danger that much confusion may result in the mind of the student unless a clear-cut distinction is made between the general financial problems of manufacturing and trading concerns and the various types of public utilities. Since, therefore, it is the purpose of the present volume to discuss *industrial financing* rather than railroad or public utility financing, with only incidental mention of the latter, it may be justifiable at this stage to point out some of the outstanding characteristics which tend to differentiate many of the financial problems of these two groups.

1. In the first place, it may be noted that public service corporations of all sorts must secure franchises from public bodies to enable them to use the highways.

2. This necessity of course gives rise to many highly significant questions of *valuation of* franchises, property rights, and the like.

3. Further, it suggests the fact that local public utilities, at any rate, are, as a rule, more cheaply and conveniently carried on as monopolies.

[1] For detailed figures see Tables 74 and 75.

4. Other interesting problems arise because of the fact that the service furnished by utility companies and railroads must be consumed in connection with the plant which renders it. No storage is possible, no holding for higher prices or changed conditions, no delays and no substitute commodity. Consequently, the question of the distribution of product and its financing is a far different one from that which arises in the case of industrial concerns. This is particularly true of the price policy to be followed.

5. Probably, also, on account of the nature of the service rendered by public utilities, particularly by railroads and telephone companies, the economic principle of "joint cost" is more in evidence than in the case of the average factory operation. Hence it should be easier to determine the actual costs of a manufactured product than to discover the true cost of a given service rendered by some types of public utilities.

6. It is also significant that the average industrial concern can, within limits, change the nature of its product, produce side-lines, or engage in subsidiary or by-product operations, all of which activities are practically impossible for any public utility. This means, of course, much greater flexibility in the financing of industrial concerns.

7. The average industrial concern can expand its plant with reasonable facility without consulting any parties but the owners. No such possibility exists in the case of most privately owned public utility companies or railroads.

8. After a certain point has been reached it is practically impossible for the average public service corporation to grow larger, inasmuch as it may already be serving the full needs of the community. For industrial concerns, however, there may be unlimited opportunity for growth in some new direction, wholly irrespective of the development of the community where the plant is located.

9. It is further significant that in the case of public utilities and railroads the investment is high relative to the annual gross income. In fact, the "gross" income is ordinarily not more than 20 per cent to 25 per cent of the investment and

frequently very much lower. A common figure for gas and electric light companies is from 15 per cent to 20 per cent, while for street railways from 12 per cent to 15 per cent is not uncommon. In some hydro-electric companies the gross income is sometimes less than 10 per cent of the total investment in the business.

For manufacturing concerns, however, the proportion of gross income to investment is often 100 per cent or more, and in the case of those trading businesses which turn their inventory rapidly it may be many hundred per cent. For example, in 1914 the total value of all products made by manufacturing concerns in the United States, practically identical with the gross income of the average public utility company, amounted to 112 per cent of the invested capital reported. The census figures for the year 1919 indicate that this ratio had increased to 145 per cent due to the fact that volume of sales in dollars had increased much more rapidly than capital invested in the business. In certain types of trading concerns the entire investment may be turned over quarterly, or even monthly, or perhaps more frequently. The small peanut vender, for example, might conceivably turn his investment over 365 times per year!

10. Closely related to the foregoing considerations is the "operating ratio," that is, the ratio of expenses to revenue. For public utility concerns this ratio (including taxes as expenses) is, in prosperous companies, frequently from 60 per cent to 70 per cent, sometimes less, sometimes greater, depending upon circumstances. This ratio, to be sure, runs very low in hydro-electric companies where labor and fuel expenses have been reduced almost to the vanishing point. In such cases total operating expenses may not be as much as 20 per cent of the income from sales of current. On the other hand, during the recent difficult years the operating ratio of railways in the United States has gone as high as 90 per cent or more, whereas it might normally be expected to be from 65 per cent to 70 per cent or less. In contrast to these figures it is interesting to find that the operating ratio of all manufacturing concerns in the United States in the year 1909 was 89.2 per cent. In

many cases the figure was much higher than 90 per cent, even for very prosperous concerns.

11. It will normally be found that those types of concerns whose annual turnover of capital is very slow, as in the case of public utilities, which require several years for one turnover, usually have a relatively high fixed investment. This is shown by figures compiled for the year 1918, whereby it appears that 57 of the larger industrial companies in the United States reported aggregate investments in plant, equipment and the like, including real estate, of about 51 per cent of the total assets. At the same period all commercial central electric light and power stations in the United States reported a fixed investment of about 82 per cent of the total assets. For street railways and telephone companies the proportion is even higher. The fixed investment is usually found to be highest in the case of steam railways provided rolling stock is included. Under these circumstances it is evident that the "fixed" charges of all types of public utility business will be relatively high as compared with the average industrial concern. Hence a much lower operating ratio is necessary in the case of the former in order to enable interest payments, depreciation allowances, and the like, to be met. A small increase in the operating ratio, therefore, mav make it impossible for a public utility concern to meet its fixed charges, in spite of the fact that this ratio is normally much lower than that of typical industrial concerns.

12. Closely related to the above considerations is the fact that public utilities can, as a rule, count on a relatively steady income, since the demand for their service is reasonably constant. This condition holds true for the railroads to a much less degree; but for many manufacturing concerns the income is very sporadic and uncertain and the demand for the product cannot readily be predicted. Inevitably, therefore, this factor alone will vitally influence the method of capitalization followed by industrial concerns. They will normally raise comparatively little capital by means of bonds and mortgages, the interest payment on which might not readily be met in times of adversity, whereas it is usually safe for public utility con-

cerns to carry a fairly heavy bonded indebtedness. Frequently the outstanding bonds of the various public utility concerns will amount to 40 per cent or 50 per cent of the total liabilities, the proportion being even higher for railroads, while for 57 large industrial concerns in 1918 the proportion was less than 11 per cent.

13. Again, it is worthy of note that a public utility concern furnishing "services" rather than tangible commodities does not have to carry a merchandise inventory, hence is not as a rule confronted with the problem of borrowing from the commercial banks for temporary purposes. Also, the "accounts receivable" will normally be extremely low or almost non-existent. The street railway business, for example, and much of the steam railroad service is on a cash basis. The other public utilities as a rule run only monthly bills upon which they can ordinarily force prompt collection because of the essential nature of the service rendered, as well as because of the customary legal provisions which permit the refusal of further service to delinquent customers. The average manufacturing concern, on the other hand, must usually carry a large inventory, probably on the average at least 25 per cent to 35 per cent of the annual net sales. Its accounts receivable, also, may amount to one, two, or even three or four months of sales, and possibly higher, depending, of course, upon the usual "terms of sale" in the trade and the promptness of collections. Due to these conditions the average industrial business, whether manufacturing or trading, has on its hands a very vital problem of "short time" financing which is wholly unknown to the public utility concern.

14. Should serious financial difficulties arise, due to mismanagement, there is always the possibility of selling the plant of a public service corporation, for its services are needed no matter what happens. This statement, of course, assumes that the plant was originally built to meet a real need of the community. The plant of an industrial concern, on the other hand, may be practically worthless under a forced sale, no matter how carefully constructed that plant may be.

15. Finally, when questions of valuation and capitalization arise it should constantly be borne in mind that the public utility concern can serve its purpose only in the locality where it operates. It must therefore be allowed to earn a fair return on a fair investment, even though the rates charged in one place might thereby be much higher than the rates charged for a similar service rendered in some other locality. Earning power, therefore, cannot properly be the basis of capitalization or valuation of a public service corporation.

The situation is far different, however, for an industrial concern, which is normally subject to nation-wide or even international competition in the sale of its product. It is apparent, therefore, that the typical industrial company can be capitalized safely only on the basis of demonstrated earning capacity over a period of years, estimated on a conservative basis. Because of the competitive situation, the physical value of the plant of a business enterprise can not usually be greater than its cost of reproduction, and it may be much less, or even practically worthless in case of liquidation. The fixed assets of a public utility concern, on the other hand, may and sometimes in fairness to owners *must* be properly valued at a figure considerably higher than the actual reproduction cost. At all events, for rate making purposes the "physical value" of public utilities is stressed, while it is of no consequence in determining the price at which goods shall sell in a competitive market.

The foregoing considerations are only a few of the many which tend to differentiate the financial affairs of public service enterprises from those of business concerns in general. But these facts should be sufficient to indicate that it is scarcely justifiable to combine these two totally distinct kinds of business for purposes of general discussion and financial analysis.

On account of the conditions indicated it has been possible to bring the finances of railroads and public utilities to a reasonable degree of standardization. Because of the direct public interest involved, general public regulation of public service corporations has developed, and this regulation has tended to bring about an even higher degree of standardization.

The finances of industrial concerns, on the contrary, have hitherto been regulated by public bodies only in a very indefinite sort of a way. The latter have accordingly been much freer and more flexible in their methods of financing.

At this point it may be of some interest to contrast generally the financial importance of business concerns of various types. In 1928 the investment in railways is estimated at about $25,000,000,000. The investment in local public utilities, including electric light and power, street railroads, telephones and telegraph, and water supply systems, is estimated to be almost as great, divided as follows: electric light and power, about $11,000,000,000; electric street railroads (and subways), about $5,000,000,000; telephone and telegraph, at least $4,000,000,000; gas plants, etc., about $2,000,000,000; water supply and other utilities around $2,000,000,000.

In 1926, 455,320 business corporations made returns to the United States Commissioner of Internal Revenue. Of these, 359,449, or 79 per cent, reported total assets of $250,178,684,379. The estimated investment of these corporations (capital stock, surplus, and funded debt) was about $141,000,000,000. The investment in important lines of industry, for those corporations supplying complete information, was reported as follows:

Manufacturing	$50,613,000,000
Railroads and local public utilities	36,442,000,000
Financial institutions (including insurance companies)	25,908,000,000
Trading enterprises	12,643,000,000
Mining	9,360,000,000

Had unreported corporations been included, the total investment would probably have been between $155,000,000,000 and $175,000,000,000, estimated on the basis indicated. But the net earnings of the 1,288,206 partnerships and individual businesses reported amounted to $5,516,000,000 in 1925. If these earnings were capitalized at 10 per cent, which is probably too high a rate, around $55,000,000,000 would be added to the above estimates. In addition, there are still unaccounted for about 500,000 unincorporated businesses, both trading and personal service, which were either operated at a deficit or realized net earnings so small that it was not necessary to report to the Government. Accordingly, it is safe to assume that well over

$200,000,000,000, or probably more than 50 per cent of the total wealth of the United States, is invested in business enterprises of some sort. (See Table 82, Appendix.)

FINANCIAL DIFFERENCES BETWEEN INDUSTRIAL CONCERNS

Though from a financial point of view there are very interesting and definite contrasts between industrial concerns and public service corporations, yet it must also be borne in mind that striking differences exist between industrial concerns themselves. In fact, an almost endless classification might be made on the basis of the type of organization, the nature of the product and the size and age of the establishment. Further, great differences of much financial significance exist between those concerns which produce staples and those which deal only in specialties or novelties. Those concerns engaged in seasonal businesses of various sorts are in an entirely different position from the ones which turn out a product for which there is a steady demand. The seasoned type can also be readily distinguished from the more spectacular kind of undertaking. The concerns which are engaged in manufacturing may be set off, with regard to their financial problems, from mining enterprises, and from the trading companies or those organizations which merely render service, such as the banking business, amusement companies, hotels, and the like.[1]

Furthermore, it must be observed that, even in the same line of industry, there has not hitherto been much standardization, due to important differences in location, plant construction, management, form of organization, and the like. In an industrial concern, therefore, of whatever type it may be, the per-

[1] The number of possible groupings of industrial concerns for the purpose of financial study is almost limitless. The United States Census Bureau for statistical purposes arranges manufacturing concerns in the following 16 general groups:

1. Food and kindred products.
2. Textiles and their products.
3. Iron and steel and their products, not including machinery.
4. Lumber and allied products.
5. Leather and its manufactured products.
6. Rubber products.
7. Paper, printing, etc.
8. Chemicals and allied products.
9. Stone, clay, and glass products.
10. Metals and metal products, other than iron and steel.
11. Tobacco manufacturers.

(Footnote continued on page 40.)

sonal factor tends to play a far more important part than in the case of public service corporations. Hence one might normally expect to find a wide variation in the financial problems of industrial concerns, and it is easy to fall into the error of thinking that the principles of finance which apply in one case will have little or no relation to another case.

It is of course true that on account of changes in general business conditions, what is apparently good financing at one time may be very bad financing at another time. It is further true that the financial "set up" of certain types of industrial concerns must, from the nature of their operations, differ greatly. Yet in spite of these important differences it is probable that there are a few fundamental principles of sound busi-

12. Machinery, except transportation equipment.
13. Musical instruments and phonographs.
14. Transportation equipment, air, land, water.
15. Railroad repair shops.
16. Miscellaneous industries.

The classification used by the United States Commissioner of Internal Revenue for tax purposes follows:

Agriculture and related industries.

Mining and quarrying:
- Coal mining.
- Metal mining.
- Gas and oil.
- All other mining and quarrying.

Manufacturing:
- Food products, liquors, and tobacco.
- Textile and textile products.
- Leather and leather products.
- Rubber and rubber goods.
- Lumber and wood products.
- Paper and pulp products.
- Printing and publishing.
- Chemicals and allied substances.
- Stone, clay, and glass products.
- Metal and metal products.
- All other manufacturing industries.

Construction.

Transportation and other public utilities:
- Steam railroads.
- Electric railroads.
- Ocean lines, transoceanic and coastal.
- All other transportation.
- Electric light and power companies.
- Gas companies.
- Telephone and telegraph companies.
- All other public utilities.

Trade.

Public service—Professional, amusements, hotels, etc.

Finance, banking, insurance, etc.
- Banks, general, not precisely defined or private bankers.
- National banks.
- State banks.
- All other banking.
- Life insurance, stock and mutual companies.
- Accident, fire, and marine, stock and mutual companies.
- All other insurance companies.

Combinations, predominant industry not ascertainable.

Concerns in liquidation.

Inactive concerns.

ness financing which are common to all types of concerns, whether large or small. No business concern is a law unto itself, and it is a serious mistake to assume that the lessons learned in the financial management of one business are valueless when applied to another concern or type of industry.

THE FINANCIAL PROBLEMS OF THE AVERAGE INDUSTRIAL CONCERN

It should finally be noted that the traditional treatment of the general subject of finance has devoted particular attention to the work of the promoter, the issue and distribution of securities of different kinds, questions of reorganization and receivership, and the legal and public aspects of corporate financing. All of these topics are of vital interest and of great significance. However, it would seem that perhaps too much attention has been given to what might be termed "financial manipulation," and too little attention to the internal financing of the average business concern. Much has been said about the flotation of stocks and bonds and trading on the stockholder's "equity," while comparatively little information has been given as to how a business might be conducted in such a way as to meet its obligations and put sound dollars back of all securities issued.

Certainly it should be of greater importance to know how to manage the finances of business in such a way that it would be unnecessary to issue new obligations, rather than merely to study the cleverest method of getting out of a financial difficulty which has already arisen. The chief function of the financial expert should be to instruct his clients how to prevent financial disease rather than to attempt to find a temporary cure after the patient has been smitten by a malady which might have been prevented. Too much attention has perhaps been given in this country to telling people how to "make" more money instead of showing them how to *save* more money. This attitude has brought about a very superficial understanding of the fundamentals of business finance on the part of many who should be well informed.

However, the experiences of the past three years have perhaps convinced many business men that the quickest way to increase capital is *not to lose it.* Probably it is, in the long run, a far more productive procedure, economically speaking, to gain $10,000, save and invest it, than to win $100,000 and lose $90,000 of this amount.

What then are the normal problems of the average industrial concern which merit attention in the following discussion? In the year 1926, 197,186 industrial corporations out of a total of 455,320 failed to earn any net income, but reported instead an aggregate deficit of $2,168,710,302.[1] This general proportion was common during several of the preceding prosperous years. Since 1919 the number of unsuccessful concerns has been increasing. Obviously, therefore, it should be worth while to examine the financial problems of these, and similar concerns which have been more successful, with a view to discovering why some succeed and others fail when measured by the yard-stick of financial results. Accordingly, it would seem that such problems as the following might with profit be touched upon in a practical discussion of business finance:

Under what conditions is it profitable to launch a new enterprise, and what should be its form of organization?

What should be the basis of capitalization and how shall funds be raised, both in the beginning and for purposes of expansion?

When is expansion justifiable, and how can the financial future of a business be safeguarded?

When shall a concern borrow for current needs and how shall working capital be provided?

What should be the relation of the business to the commercial bank? What can the bank properly be expected to do for a business concern? What limitations should be placed upon bank credit?

How shall purchases be financed, and when and how shall they be made? How extensively should a concern purchase?

[1] *Statistics of Income*, 1926, page 13.

What does it cost to produce goods? What factors most influence the cost of production? How can waste be eliminated? How are costs and earnings affected by the size of the producing unit?

When shall a concern sell and when refrain from selling? What are the chief problems of commercial credit and what should be the relation of the sales department to the credit department? What policy should be followed regarding terms of sale, collections, discounts, and the like? What is the proper price policy? When does it pay to advertise?

How can financial control be exercised over the various departments of a business? What disposal shall be made of the earnings?

What are the causes of financial involvement and failures and how can they be avoided or the effects minimized?

To what extent does legislation interfere with legitimate business financing?

Finally, what principles and practises lead in the long run to financial success?

THE POINT OF VIEW

From the foregoing suggestions it can be seen that the writer takes no narrow view of the subject of business finance. Its scope is limited only by the activities of the business itself. There can be no successful management of any enterprise without a proper coordination of all the departments of a business through a central financial control. Hence, an intelligent study of financial problems constantly calls for the application of the pragmatic financial test to those diverse problems and policies which are frequently thought of as being wholly separate from finance. In this connection, also, an attempt is made to study business conditions and to indicate what they *can be* in the light of what they *have been* under the best financial practise.

Furthermore, throughout his study, the reader should constantly bear in mind the following important considerations if he wishes sympathetically to interpret business problems.

1. No matter how careful a preliminary analysis has been made, there is always an unavoidable risk and uncertainty connected with the launching of any new enterprise. No one can absolutely foresee the end from the beginning. Consequently any business is in its initial stages something of a speculation.

2. For industrial concerns, there is practically always competition to be reckoned with. This competition may be actual and aggressive, or merely potential and problematical. Yet the *fact* of competition frequently makes it necessary for a business to shape its financial policy in such a manner as might at first seem unjustifiable from the theoretical point of view. In the long run, therefore, the economically effective, barring legal interference, will survive

3. Theories may be pretty, but a business must make profits for its owners; otherwise it cannot justify its existence. This constant and immediate need of making profits frequently gives little opportunity for those who are managing the business to follow the policies which they might wish to pursue. Nor is it always possible to delay new decisions until the financial outcome of earlier policies becomes clear.

4. No matter how carefully the numerous problems of the average business concern have been studied, there is always a tremendous amount of uncertainty regarding the future. To be sure, very valuable lessons may be gleaned from past experience and from an analysis of past and present facts. Where the element of human judgment must be reckoned with, however, the future can by no means always be clearly forecasted. Decisions must be made, responsibilities must be taken, and the financially successful concern is the one which makes the fewest mistakes.

CHAPTER III

SHALL THE ENTERPRISE BE LAUNCHED?

Economic importance of a proper beginning—Ease with which unprofitable concerns are launched—Specific conditions under which a new enterprise may profitably be started—The real financial test—Launching the speculative enterprise—Questions to be raised—Illustrative cases—A safe rule to follow.

IN the last analysis the purpose of a business enterprise is to make profits for its owners. This end cannot in the long run be achieved unless a real service is rendered to some portion of the consuming public. Yet an examination of readily available statistics discloses the fact that a very substantial number, even of the larger business concerns, fail to earn any profits or actually operate at a loss until they disappear from the industrial stage. It is probably true that by far the greater proportion of businesses in the United States utterly fail from the financial point of view to justify their existence.

Human nature is generally sanguine and usually ready to take a chance on the unknown. New propositions can as a rule be readily financed, if they are presented in such a way as to appeal to the cupidity or the imagination of the so-called "investor." Probably, therefore, it may be easier to raise money to finance a doubtful or highly speculative undertaking than to attract capital for a more conservative and better-known project. Upon the whole, it may safely be stated that it is far easier to enlist financial interest in an enterprise, than to originate and develop an idea which, from the economic point of view, deserves to be financed. While there may be certain intangible and psychological gains resulting from the easy entrance into business, it is probably true that the launching of most enterprises is merely an exercise in lost motion—and lost motion in the industrial world means an economic waste for which the consumer must pay.

Examples might be multiplied from present-day experience to prove the truth of the above assertion. The following instance is merely a random selection. About 1918, an automobile company was incorporated in a prosperous state of the Middle West. Its factory was to be built in a town having a few thousand inhabitants not far away from the leading city of the state. The promoter of the company was an able salesman who made glowing claims for the new car which his company expected to produce. An appeal was made to civic pride and more particularly to local self-interest. It was represented that the launching of this project would soon make employment for hundreds and even thousands of men, and would increase immeasurably business activities and property values in the locality.

Gradually the leaders of the community were won over to the new company to such an extent that they were ready to place absolute confidence in the claims of the promoters. Stock was sold with comparatively little effort to people in the adjoining districts and more or less throughout the state. The stock selling campaign was even extended to many other western states. The selling appeal was made only to native-born Americans of the better type—not to the foreign element. Within two years' time, stock to the amount of nearly $5,000,000 had been sold to some 54,000 people, and a factory had been built. No cars, however, had been produced, and there was practically no equipment installed in the plant. Some of the bankers in the neighboring city were in the meantime suspicious of the entire undertaking, and after an investigation, published their findings to the effect that the promoter of this enterprise was probably a swindler, as he had failed to make good his promises in many important regards. The local investors, however, were angered by this report to such an extent, that, through their chamber of commerce, they decided to break off all business relations with the adjoining city and to boycott trade with those who would dare to question the integrity of their pet project.

It is scarcely necessary to indicate the sequel to this episode,

the final chapter of which was published only a few years ago. Suffice it to say that not only was the time wholly inopportune to launch an enterprise of this sort, as the automobile industry was already overexpanded and general purchasing power was beginning to decline, but also it would have been utterly impossible in the place chosen to make a car which could be sold at a reasonable price. It was too far removed from the ordinary sources of supply and from the better markets. There were countless other drawbacks as well, and more significant was the fact that practically all the money raised for the "launching" of this enterprise went to pay commissions to stock salesmen and to defray the "expenses" of the promoter. From start to finish the swindle was so obvious that it seems almost past belief that prosperous American citizens would be "taken in." Yet it was only after "investors" had been separated from about $5,000,000 in cash that they were convinced of the futility of the new enterprise. Nor was this a get-rich-quick scheme such as Ponzi launched several years ago.

CONDITIONS UNDER WHICH A NEW ENTERPRISE MAY PROFITABLY BE LAUNCHED

What then are the conditions under which the launching of a new business is financially justifiable? To answer this question it will be convenient to divide the proposed schemes into two classes. In the first class may be grouped those concerns the purpose of which is to render a service in all essential respects similar to that already being performed by other establishments in the field. The second group includes those concerns the purpose of which is to render some new service. This group in turn may be divided into two classes: (*a*) those enterprises which propose to perform a new service, which will be a substitute for that already offered by established concerns, and (*b*) those enterprises the purpose of which is to render wholly different services, develop and cater to new tastes, and the like. Perhaps it will be simpler and more effective to devote particular attention to the first group.

TESTS FOR LAUNCHING THE NON-SPECULATIVE ENTERPRISE

Let us assume, therefore, that there is a demand for the type of goods which the new concern proposes to produce. Let us assume, further, that a reasonable "market analysis" has been made and that it seems probable that the demand for such goods or services will continue and perhaps increase. The information gained through careful analysis of this sort is vastly significant and absolutely essential to any scientific planning of a business, but it does not in itself give any financial justification for introducing into the field a particular *new concern.* The value of the information thus secured, therefore, is *negative* rather than *positive.* This analysis does not as a rule show *what* concern should be launched, but rather what considerations are involved before *any* concern should enter the field. Accordingly it is worth while to examine some of the special financial tests which should be imposed upon a prospective enterprise.

1. Has the concern discovered a new and valuable process which will in itself enable the product to be made at a lower cost than can be attained by competitors already in the field? Have new patents been developed and are they of such unquestioned importance and validity that the new enterprise will in this manner have a distinct advantage over others in the field, due to superior technical efficiency which may, perhaps, ultimately lead to control of the market? In this connection it is well to bear in mind that even an excellent patent may sometimes prove a liability rather than an asset when there are already powerful competitors who may contest its validity.

2. Is there reason to believe that the active managers of the new enterprise have unusual ability, gained through past successful experience with other concerns of a similar sort, or arising in some other manner? Have they shown uncommon capacity to deal with labor in such a manner as to avoid industrial disputes, secure greater effectiveness, and so on? Do they bring a high degree of technical ability to the new undertaking? Are they particularly good salesmen or financiers? These considerations are vastly important, since bad manage-

ment or even mediocre management can ruin a business which otherwise would grow almost of its own momentum.

3. Is it possible to launch the new enterprise with markedly lower investment in fixed assets as the result of decreased construction costs, superior plant economies from the engineering point of view, and other like gains? In some instances, such a situation would give the new concern a marked advantage over competitors because of its lower overhead. There have been in the last two or three years, instances of new concerns which have secured their plants very cheaply at a time when construction in general could be carried on only at prohibitive figures, by purchasing from the government some of its dismantled plants at a nominal price.

4. Will the proposed concern probably have a peculiar advantage because of the contemplated size of its establishment? There are, no doubt, in many lines of manufacturing industry, certain economically strategic sizes for factories. One who through careful investigation discovers the most advantageous size of organization may have a decided advantage over those already in the field. On the other hand, most newcomers, have practically no idea whatever as to the desirable size of the productive unit. Probably the usual tendency is to organize on too large a scale. However, there are also many cases in which the proposed scale of business is too small to enable the concern to make a profit no matter how great its other advantages. There is a *minimum* size below which a business cannot be effectively operated as well as a *maximum* size. Probably in few instances is the "happy medium" between these two points ascertained.[1]

5. Again, the location of the proposed concern might be such as to give it a superior position over competitors, not only because of possible economies in plant construction, but also because of transportation and other advantages. These advantages may result from nearness to the source of supply of raw materials, or close proximity to the market, cheap transportation, and the like. Important, also, is the availability of a

[1] See Chapter XXI.

well-trained and comparatively docile labor supply. Sometimes, changes in the trend of population alone will bring advantages of this sort, just as they very frequently deprive a company of earlier geographical advantages.[1]

[1] Even when the general desirability of launching an enterprise is assured, the question of plant location is always a very important one. Some of the considerations which will influence the geographic location of the establishment are the following:

1. The accessibility of suitable fuel, or of electricity or water power. In this connection it is frequently absolutely essential for a factory to be near a plentiful source of water supply, even though water is not in any way used as motive power.

2. The availability of raw materials needed in the business.

3. The question of suitable transportation facilities, either in connection with the transportation of raw material or the marketing of the finished product. The costs of transportation and the speed of the transportation frequently outweigh all other considerations.

4. The nature of the market for the goods to be produced or dealt in. Different policies must be followed depending upon whether the market is merely local, sectional, or national.

5. The availability of an adequate supply of labor is important. Even though there may not be a trained labor force, it is desirable to be able to choose from workers who can readily be trained. In this connection the nationality and standard of living of workers is sometimes of great importance.

6. Frequently the question of the geographic division of labor is of much significance. Whether this be the result of natural or purely artificial considerations, it is frequently desirable to launch the new enterprise in the locality where others of a similar sort are in operation. Under such circumstances several gains may result. (*a*) It may be easier to secure satisfactory labor. (*b*) Financing may be carried on more readily because of the general familiarity of local financial interests with the particular business. (*c*) Costs may be reduced because of the development of various auxiliary enterprises which can conveniently supply the main industry.

7. Sometimes various local inducements may exercise a determining influence. Financial and other concessions are frequently made in order to attract a new enterprise to a given locality. If the project is a worthy one, such inducements may give an added advantage which cannot lightly be turned aside. Much caution, however, is needed at this point, since local ambitions usually lead to the offering of wholly unwarranted inducements to wholly uneconomical enterprises. The mere fact that concessions will be made by the business men or citizens in general of a given district, does not by any means justify the launching of an enterprise which does not measure up to some of the requirements which have been above indicated.

8. Even after the geographical location has been decided upon, the actual choice of a site for the plant is frequently deserving of very careful study. Such considerations as the following must be weighed: (*a*) Shall the factory be built in a suburban district, or in the more congested part of the city? (*b*) Shall a distributing business be located in the heart of the city where rentals are high, or shall it attempt to attract trade through other means to a location somewhat off the beaten path? (*c*) Shall an already constructed plant or building be utilized, or shall new construction be made?

6. Further, it sometimes happens, though infrequently, that the new concern enjoys more or less of a monopoly of the source of supply of raw material which is most satisfactory for the making of a particular product. Under such circumstances it may have a great advantage over competitors.

7. Occasionally, a new business may have certain financial or other connections with a second concern of such a sort as to confer a particular advantage on the new enterprise. For example, the business might be operated as a profitable "side-line" or subsidiary of some larger and stronger enterprise, so that it can afford to take initial risks, ultimately leading to success, which a business otherwise situated could not afford to do. Also, a concern might, to great advantage, utilize the by-products of another business through some contractual or other arrangement which might put it in a superior bargaining position as compared with competitors.

8. Sometimes a new local trade opportunity arises, due to the sudden growth of population in certain centers. This growth of itself may justify the launching of certain types of new enterprises, particularly of the distributing sort.

9. Finally, it may be that an unusually strong and growing demand for a certain product creates a situation in which most any reasonably efficient concern can without meeting one or more of the foregoing requirements, for a time make money. This, however, does not mean a real advantage, but is merely a temporary state of affairs. Competition in such cases will speedily cut profits down to normal and eliminate the economically ineffective.

Perhaps the foregoing tests can be summed up in the following question: *Is it probable that the new concern can sell at a somewhat lower price as good a product as is already on the market, or, in lieu of this, can it furnish a more satisfactory*

9. After all other points have been decided upon, the specific engineering problems of proper plant layout must be weighed. The most suitable construction is frequently a factor of many variables depending upon the size of business contemplated, the utilization of machinery, the question of most effective routing of materials, the convenience and safety of the workers, and so forth.

product at the same price? In either case there *may* be a reason for its existence. Unless, however, one or more of the above tests is met, it is highly improbable that there is any financial justification for the launching of a new enterprise. Rather it would be much wiser to expend capital in expanding, developing, or improving concerns already in existence.[1]

But the story does not end here. Granting that some of the above tests have been sufficiently met and that the new business seems to have an appreciable advantage over others in the field, it becomes a serious task to estimate the probable duration of these advantages. Such questions as the following should be raised:

(*a*) Is the source of supply of raw material adequate, certain, and not likely to be soon exhausted?

(*b*) What will be the probable trend of the future demand for the product in question? Public demand often shifts rapidly, particularly in the case of those goods which are not absolute necessities.

(*c*) What is the competitive situation? Potential as well as actual competition should be carefully reckoned with. Many a concern is launched at a time when the industry in question is hopelessly "over built." This was the general situation in 1919. Every successful business brings in its wake a host of imitators which cut prices.

(*d*) Is it probable that satisfactory substitutes for the commodity or service in question may soon be developed?

Many a new concern launched with high hopes and real advantages over others has fallen on the financial rocks because of the failure to study such questions as the above. Plants have been constructed just at the time when demands were shifting to new channels or when the supplies of raw material were being exhausted. Demand has frequently been

[1] The importance of *good management* has frequently been stressed in this connection. This factor cannot be too much emphasized. But it is only a first-class management that will consider the proposition from all angles as above indicated. Hence, for our discussions, it is permissible to assume that the quality of the management is satisfactory.

misunderstood or overestimated, as was the case in a recently launched fisheries company which, capitalizing government propaganda, toward the end of the War proposed to make fish-eaters out of the majority of people in the United States. The idea was no doubt excellent in theory, but in practise it is quite impossible to change tastes in food which have been developed over a period of generations. The company naturally and inevitably failed, because, even though it had possessed advantages over others in the field, there would have been really no opportunity to capitalize such advantages to its own profit in a business of this sort.

Further, it must be borne in mind that even more significant than the already enumerated tests, is the period in the Business Cycle. There are times when it is no doubt unwise to launch a new concern of *any* type, because of the generally unfavorable business conditions. This would be true even though in more normal times the project might be highly successful. Few newly born business enterprises can survive the cold waters of financial depression and the general business uncertainty which accompanies it. The high mortality rate in our recent crop of "war babies" furnishes sufficient evidence on this point. Launched at the end of the war period when all costs were excessive, they found themselves burdened with impossible debts and overhead expenses when prices began to drop. On the other hand, the mere fact that the stage in the Business Cycle is a favorable one does not in itself lend any financial justification to the launching of a new enterprise which fails to meet one or more of the fundamental tests.

In this connection it is perhaps pertinent to mention a consideration which seems frequently to be misunderstood. The statement is often made that one of the essentials to launching a new enterprise is to be assured of an adequate supply of capital. This statement indicates the loosest kind of reasoning. *If* the concern can meet some of the conditions discussed, *then* it is highly desirable that it have an adequate supply of capital at its inception, though a really first-class proposition will probably make its way in spite of early financial handicaps. The mere fact that capital is plentifully available does not justify

the launching of a new concern, any more than the existence of a college library would warrant the assertion that each student who passed through it is educated and thereby has justified his parents in sending him to college.

LAUNCHING THE SPECULATIVE ENTERPRISE

After the preceding discussion it is probably unnecessary to give extended attention to the second group of enterprises which aim to produce substitutes for services already utilized, or to render some wholly new service. These in general fall in the group of *speculative* or doubtful undertakings, 99 per cent of which no doubt always prove to be without any economic justification whatever.

In the case of the concern which proposes to render a substitute service, it is well first of all to ask whether a *real* substitute is being offered. It must further be borne in mind that such a business will be subject to great uncertainty whatever its merits. It must face not merely competition of already established producers, but also the aggressive opposition of those concerns whose product it would supplant, as well as the prejudices of the users of their goods.

It is particularly important for such concerns to study with the utmost care their probable costs of production, and to be guided by a management which commands the full confidence of the business community in spite of the competitive situation. Supposed advantages in production frequently turn out to be of very questionable value. For example, the control of a patent which might ordinarily be expected to give 100 per cent protection, may result in endless infringements and expensive lawsuits, all instigated by the already established concerns whose business is being threatened. This particular situation is made more difficult because of the fact that many an inventor, though not understanding finance, yet wishes to keep control of the company formed to produce and market his product.

A significant example of such a situation is furnished by a corporation which was organized more than 20 years ago to

manufacture specially constructed, side-dumping flat cars for railroad construction purposes, which could be automatically controlled from the engine. The idea was excellent, and after three or four years of struggle, a good deal of capital was raised by the promoters. They made a few exhibition cars which met with favorable comment, but were not immediately able to secure orders for their product. In due time, however, one of the greatest railway builders of the United States became distinctly interested in the patented car, as he wished to construct a large stretch of new railway in a territory where labor was difficult to secure. He accordingly offered to buy out the controlling managers of the business for the sum of $500,000. This offer the inventor refused to accept, reasoning that if the patent was worth half a million dollars to the railway magnate, it would probably be worth a million or more to the original owners.

The outcome of the negotiations was simply that the powerful railway owner began to have side-dumping cars of his own made as nearly as possible along the lines outlined by the patent. No doubt the patent rights were infringed; but a company possessing merely a good patent with no powerful financial backing, usually has difficulty in securing adequate legal talent. The sequel was the utter ruination of the company. The patent had great potential value if in the proper hands, but under the circumstances turned out to be an actual liability to the company, rather than an asset.

With the above indicated questions in mind as applying to those concerns which seek to develop a substitute commodity, perhaps the following questions sum up the more important additional tests.

(*a*) Is the project possible?

(*b*) Is the project feasible? In other words, can the commodity be marketed, and will it, economically speaking, be a saver of time, labor, material, and the like?

(*c*) Can the new commodity be produced at and sold for a price which the consumer will be willing to pay?

The application of some of these tests in actual practise can perhaps best be indicated by a concrete example. Not many years ago a concern was organized in one of the eastern states for the purpose of developing hydro-electrical power by means of the tides. The company proposed to "harness the tides" by the utilization of certain mechanical devices developed by the promoter, as it was alleged, one of the chief features of which was a compressed air motor. Without going into tiresome details, the aim was to use the natural ebb and flow of the tides in place of water power and coal for generating electric current.

This company further proposed to make its money in two distinct ways. First, by leasing its patent rights to municipalities which might wish to establish electrical plants of their own. Secondly, by supervising the construction of electrical plants on a commission basis for communities or companies which might wish to try the new method of electrical generation.

The process was fully protected by patents in the leading countries, while the enterprise was launched at a time when all public bodies were urging the conservation of fuel. The project, therefore, was heralded on the grounds of philanthropy, and it was represented that a new era would dawn, in which electricity could be utilized by all people at practically no expense because of the elimination of fuel costs.

Measured by any test which might be applied, this enterprise was doubtless a swindle. In the first place, what the company proposed to do was from the engineering point of view technically impossible. It was really a revamping of the old perpetual motion idea. Secondly, even if the service had been technically possible, the proposition would have been wholly unfeasible for a number of reasons. Practically all communities along the coast were already supplied with electric light and power either through local generating stations or by means of high tension lines connecting with other localities. It would have been quite unthinkable for such places to scrap their old plants and install the new method. Further, if towns in the interior were to be served, it would have been necessary for

each one to have its own little "tide water plant" out along the coast, and to secure the right of way for high tension transmission lines over long distances. This would immediately have raised political and financial difficulties of an almost insuperable sort. Also there is a distinct limit to the distance over which electricity can be transmitted efficiently and economically.

Under these circumstances, it is perfectly obvious that, even though for the sake of argument the possibility and practicability of the scheme be granted, the expense incurred in connection with its adoption would have made the cost of electricity prohibitive to the users of the new service. It would have been necessary to amortize the investment in all existing plants and to pay the enormous expense connected with the long-distance transmission of electricity, which in many cases even at the present time renders the use of hydro-electric power uneconomical. It is well known that fuel cost is only a minor part of the expense of delivering electric current to the consumer.

The author would be wholly unwarranted in introducing such a case as this one, were it not for the fact that a large number of prominent people, both in the locality and elsewhere, invested heavily in this project, thinking that because of the supposed principle of "conservation" involved, it was economically and financially justified. Further, when the materials of this problem, without comment, were presented to a finance class composed of several hundred business students, all of whom were university graduates, they almost to a man decided that the concern was an excellent one, deserving of financial support! The business was capitalized at $10,000,000, because of its vast future earning power! Aside from the cost of selling stock, the only outlay of the company was a few hundred dollars for a so-called "demonstration plant"—which always remained unfinished.

But it is by no means always the adventurer who attempts to launch a new and wholly uncalled for enterprise. Frequently men of generally sound business judgment in the fields with which they are familiar, attempt to father new projects in

other lines which are wholly unwarranted. Not many years ago, one of the ablest and best known public utility officials in the United States, with a thorough engineering training, invented an improved piece of textile machinery far superior in its mechanical perfection to anything on the market. There was no question that the new device could do the work for which it was intended much better than the appliances then being utilized.

A privately financed company was accordingly organized for exploiting the invention, and the inventor's personal capital as well as that of his friends was liberally employed. Many thousands of dollars were spent in attempting to develop the project. But for some reason practically no sales could be secured, though everyone admitted the technical superiority of the new equipment and all prospective buyers had the utmost confidence in the promoters of the new concern.

The project ended in utter failure. Why? The mechanical work which could be done by the improved apparatus was not of sufficient importance in the general operations of textile manufacture to warrant scrapping the already installed equipment and putting in the new device—even though the price was reasonable. In other words, there was really no economic justification for the invention.

Many new projects are of this sort. It is really surprising to find how many supposedly sound financiers at some time in their lives champion "lost causes." The extent to which they have sometimes been "taken in" by dubious enterprises is frequently discovered only when their strong boxes are opened after their death. In this connection it might be well to remember that J. P. Morgan fathered the International Mercantile Marine as well as the United States Steel Corporation! Certainly, every individual has a perfect right to "take a chance" on something new if he wishes, but it is highly desirable that he and those backing him be aware of the fact that the proposition *is* a speculation.

Little in addition need be said regarding the launching of that type of enterprise, the purpose of which is to render

actually new and distinctive service or to produce a hitherto unknown commodity. Most of the foregoing questions can properly be raised in such a case, and of course double caution is needed in dealing with such situations. Even granting the utmost integrity of the management, the proposition may be wholly futile, since inventors and promoters are customarily carried away by their own optimism. First of all, the essential *facts* bearing upon the situation should be most carefully analyzed and evaluated. Then, when the *possibility* of the undertaking has been demonstrated, the question should be raised: Will the new concern fill an economic need? Will it increase the sum of tangible utilities? Will it add to human happiness? Does it yield a distinct psychological value?

It is easy to be unduly prejudiced either in favor of or against pioneering projects. Many of them are clearly swindles. Yet probably more people are induced to throw their money away on new concerns which propose to follow well-known and generally understood lines of activity, such as mining and the oil business, than on wholly novel undertakings. No doubt hundreds of millions of dollars annually are sunk in such "holes in the ground." Many more millions have been invested recently in local rubber tire plants, theatres, and the like, promoted by men who are either dishonest or misguided. Every new and successful business brings in its wake a host of imitators who honestly or dishonestly prey upon the credulity of the public. An appeal to local pride or self-interest is sufficient to extract millions from the pockets of the American people, while the appeal to greed is a hundred times more effective. Most untrained people think an enterprise must be sound if they can actually see its buildings in their community!

The service of the "promoter" has been much overemphasized. Waiving a few exceptions, provided the idea is a good one, and a real human want can be served by the proposed business, funds will be forthcoming in due time. Finances flow more freely than original and valuable ideas. Really successful businesses are seldom "launched." They do not need to be "launched." They grow, quietly and through toil and sacrifice until they earn their right to economic existence. One

need only mention such concerns as the American Telephone and Telegraph Company, the Eastman Kodak, and the Ford Motor Company, to give point to these assertions. The man who can give the world a real service will usually find the world ready to pay for that service at the proper time. It is usually the man without constructive ideas who most feels the need of the public's cash. All business is a speculation, and surprisingly few new enterprises are even worthy to be termed "safe" speculations.

In conclusion, the man who feels called upon to launch a new business in the hope of making money would be wise to reckon somewhat as follows:

Estimate the initial outlays and expenses at a liberal figure, adding a goodly percentage for contingencies. Allow generously for development expenses, advertising, and the like. Find out the probable unit cost of the product or service to be offered, and then make large additional allowances for underestimates and contingencies. Be very conservative in reckoning the time which must elapse before the volume of sales will be sufficient to make the business pay. Maintain an attitude of judicious pessimism regarding the public demand for the product. Plan how initial financial obligations can be met and endeavor to forecast how new funds can be secured in case of unforeseen necessities.

If it then seems probable that a profit can be made, let the enterprise be launched! This is no counsel of perfection, but only common sense. Anyone who wishes to take a gambler's chance in these matters has a perfect right to do so. However, he should not deceive himself or his friends, and he should never risk more than he can afford to lose. It is certain that if more careful analyses were made along the lines above indicated, great economic loss would thereby be prevented.

CHAPTER IV

THE FORM OF ORGANIZATION

Numerical importance of the unincorporated business unit—Advantages and disadvantages of individual proprietorship—The significance and economic justification of the partnership—The joint stock company—The early history and development of the corporation—The distinguishing features of the corporation—The corporate charter and its provisions—Advantages and disadvantages of the corporation—Lack of uniform corporation laws and the financial consequences—Choosing the place of incorporation—The voluntary association and its significance—The trust—The holding company and its alleged advantages—Reasons for the development of subsidiary companies—Limitations of the corporate form of organization.

MUCH attention is sometimes given to the form of organization of business enterprises, though from the financial point of view this is not necessarily a particularly significant problem. Within limits it is probably safe to say that the type of organization which is "best administered" is best. Some businesses are much better operated as individual enterprises or partnerships and others as corporations. In fact, there are many instances in which no form but that of the corporation would be possible. For present purposes little attention need be given to the legal aspects of the question. Granting, however, that an undertaking deserves to be launched, it may be of passing interest to note briefly some of the commoner forms of organization for purposes of financial administration.

It appears from the accompanying figures that for manufacturing concerns in the United States the commonest form of ownership is the individually conducted, unincorporated enterprise. In 1914, 51.6 per cent of all manufacturing businesses were reported to the United States Census Bureau as "individual" enterprises. The proportion was not substantially changed in 1919. It is interesting to note, however, that this numerous group of establishments produced slightly less than

TABLE 8

Character of Ownership of Manufacturing Concerns in the United States

	Number		Wage Earners		Value of Products			Value Added by Manufacture		
	Establishments	Per Cent Distribution	Average Number	Average per Establishment	Amount	Average per Establishment	Per Cent Distribution	Amount	Average per Establishment	Per Cent Distribution
All Classes										
1919	290,105	100.0	9,096,372	31.3	$62,418,078,773	$215,234	100.0	$25,041,698,490	$ 86,352	100.0
1914	275,791	100.0	7,036,337	25.5	24,246,434,724	87,915	100.0	9,878,345,893	35,818	100.0
1909	268,491	100.0	6,615,046	25.0	20,672,051,870	76,993	100.0	8,529,260,992	31,767	100.0
1904	216,180	100.0	5,468,383	25.0	14,793,902,563	68,433	100.0	6,293,694,753	29,113	100.0
Individuals										
1919	138,112	47.6	623,468	6.9	3,536,321,836	25,627	5.7	....	......	.....
1914	142,436	51.6	707,568	10.1	1,925,518,298	13,518	7.9	903,524,881	6,343	9.1
1909	140,605	52.4	804,883	6.0	2,042,061,500	14,523	9.9	968,824,072	6,890	11.4
1904	113,946	52.7	755,923	7.0	1,702,830,624	14,944	11.5	824,292,887	7,234	13.1
Corporations										
1919	91,516	31.6	7,874,117	86.6	54,740,978,524	598,262	87.7	....	......	.....
1914	78,151	28.3	5,649,646	80.3	20,181,279,071	258,174	83.2	8,092,885,971	103,498	81.9
1909	69,501	25.9	5,002.393	72.0	16,341,116,634	235,121	79.0	6,582,207,117	94,707	77.2
1904	51,097	23.6	3,862,698	76.0	10,904,069,307	213,399	73.7	4,526,055,153	88,578	71.9
All Others										
1919	60,477	20.8	598,787	6.6	4,140,778,413	69,013	6.6	....	......	.....
1914	55,204	20.0	679,123	9.7	2,139,637,355	38,835	8.8	881,935,041	16,052	9.0
1909	58,385	21.7	807,770	18.0	2,288,873,736	39,203	11.1	978,229,803	16,755	11.5
1904	51,137	23.7	849,762	21.0	2,187,002,632	42,768	14.8	943,346,713	18,447	15.0

8 per cent of the total value of manufactured products during the year. Further, the relative importance of this type of enterprise has been slightly decreasing for many years, while incorporated concerns have been growing in number and particularly in importance as measured by the value of their products.

It is also significant to find that in the year 1925 the total number of business corporations of all sorts making a return to the United States Commissioner of Internal Revenue for tax purposes, was only 430,072. At this same date the number of unincorporated businesses reported was 1,288,206, of which 978,792 appear to have been individual enterprises, while the remaining were partnerships. In addition, Dun's and Bradstreet's report about 500,000 more small businesses. The proportion of incorporated concerns, however, has held close to 20 per cent of the total number during the past 10 years. The net income from individually operated businesses and partnerships is more than half as great as that derived from incorporated concerns. In 1926, the reported net income from business pursuits, as indicated by personal returns, was $5,515,829,953, while the net income of all corporations earning a profit was $9,583,684,000, from which should be deducted a deficit of $1,962,628,000 to arrive at the real net.

A further examination of the data compiled by the United States Commissioner of Internal Revenue for 1925 discloses the fact that 35.5 per cent, or $8,980,000,000 of the total personal income of the people of the United States was in that year derived from the profits of business enterprises, excluding wages, interest, and such. If interest is included, the figure is increased to $10,795,000,000, or 42.7 per cent. Of the amount indicated, 14.6 per cent was the income from individually owned business operations; 7.2 per cent was derived from partnerships and personal service corporations; while the remaining 13.7 per cent represented the dividends received from incorporated enterprises. It is interesting to find that 21.8 per cent of the total individual income was derived from unincorporated business enterprises, while less than two-thirds of this amount was received in dividends from corporations.

INDIVIDUAL PROPRIETORSHIP

There are doubtless a number of definite advantages to be derived from the individual ownership of business enterprise in certain types of industry. (*1*) From the legal point of view this method is perfectly flexible. (*2*) From the point of view of administration, the individual is wholly independent of others and can make his decisions without any delay or interference. (*3*) This form of ownership avoids many of the special obligations and expenses which must be incurred by other forms, particularly by corporations. (*4*) The individually owned enterprise, not being required to file any public documents of any sort or to take others into its confidence, can have its operations kept wholly secret. Any or all of these advantages are probably sufficient to justify the continuance of this form of control for the smaller business concerns, particularly for merchandising business and handicraft work.

On the other hand, there are of course obvious drawbacks to individually owned and controlled enterprises. (*1*) In the first place, such a business is usually rather definitely limited as to the amount of capital which can be secured from outsiders. Not many methods of financing are open to it except that of reinvesting earnings. (*2*) The owner naturally assumes a heavy risk, inasmuch as all of his assets, whether involved in the business or not, can legally be attached for the payment of debts contracted in the business. (*3*) Upon the death of the owner there is grave possibility that the business will be wholly disrupted. Other disadvantages might be cited though they are probably of minor importance, and the fact still remains that, all things considered, there is much to be said in favor of the continuance of individual ownership.

THE PARTNERSHIP

One-fifth of all manufacturing concerns in the United States are organized as partnerships, firms, cooperative enterprises, and the like. It also appears that about 11 per cent of business concerns of *all* types are conducted as partnerships or

personal service corporations. This form of organization does not seem to have been decreasing in relative importance during recent years. The appreciable gain between 1914 and 1919 is accounted for largely by the attempt to avoid the burden of federal income and excess profits taxes which fell heavier on the corporate form of organization. If earlier tendencies continue, however, we may expect some decline in the popularity of this form of ownership within the next few years.

A partnership may be defined as "a relation existing between two or more persons who agree to carry on a business in common with a view to private gain." Partnership agreements are of numerous forms, the "general" being more common, though "limited" and "special" partnerships are frequently met with. A special partnership is really of little significance for purposes of present study since it is usually formed merely to facilitate the transaction of a single piece of business. Limited partnerships must have at least one general partner whose liability is unlimited, while the others may be "special partners" whose liability is measured only by the amount which they have actually invested in the partnership.

The distinguishing feature of the partnership, some of which may be thought of as advantages, may be mentioned as follows:

(*1*) The agreement which brings the partnership into existence is based on private contract—not on a franchise secured from the state. Therefore, greater flexibility may be secured. (*2*) Such a form of organization makes it possible to secure a larger amount of capital for carrying on an industrial enterprise, and permits much more flexibility in financing than can be secured by the individually owned enterprise. (*3*) It is clearly possible for the partnership to secure good managerial ability, and for individual partners to become specialists along particular lines. (*4*) The partners and the partnership not being legally distinct, and every partner having unlimited liability and responsibility for the obligations and actions of the partnership, its credit position may presumably, in certain cases, be stronger than that of an individually owned enterprise or of a corporation.

It must be borne in mind, however, that in actual practise the partnership form of organization may be found unsatisfactory for a number of reasons. (*1*) It is frequently difficult to find wholly congenial partners or to maintain altogether pleasant relations even after a partnership has been formed. Any dissension arising may seriously weaken the credit position of the concern. (*2*) The partnership form of organization is inevitably somewhat limited when attempting to raise new capital, since the obvious way to secure additional funds, aside from reinvesting earnings, is to take in new partners. For a number of very good reasons this may not be a desirable course to pursue. (*3*) Also, from the investor's point of view it is easy to put money into a partnership, but extremely difficult to get it out. (*4*) The life of a partnership is distinctly limited. It may terminate either on the expiration of the time indicated in the articles of co-partnery, or, what is more serious, it may be ended by the death or wrong doing of one of the partners.

These disadvantages may make the partnership a rather uncertain form of organization for conducting large-scale business enterprises, though so able a man as Carnegie advocated this method of ownership for large business on the ground that it served to maintain the close personal relations which are essential to the successful conduct of industry.

There are, however, innumerable examples of concerns which have grown to great size as partnerships, among which may be mentioned the Baldwin Locomotive Works which was first incorporated in 1911 after a continuous existence of more than three quarters of a century; the F. W. Woolworth Company, incorporated in 1912; the Endicott-Johnson Corporation, which was the largest manufacturer of leather shoes and footwear in the world at the time of its incorporation in 1919. Early in August, 1922, also, a notice appeared that Gimbel Brothers, one of the largest department stores in the world, conducting a business in three of the most important cities in the United States, had just been incorporated after a successful operation of 80 years. The company's volume of sales was at the rate of about $70,000,000 a year. The prime reason given by Mr. Gimbel for incorporating and issuing stock was

to enable the older executives, buyers, and employees to become stockholders. It is also probable that as some of the active partners were growing old, it might be difficult to effect a ready readjustment of ownership upon their death or retirement from the business, unless the corporate form of organization were adopted.

The partnership is very common in private banking institutions, commercial paper houses, brokerage concerns, and the like. For such types of concerns it is essential that the highest degree of individual responsibility be maintained. Hence it is desirable that the ownership be not widely distributed or the responsibility diluted, as is sometimes the case in corporations. Further, the rules of the New York Stock Exchange prevent incorporated concerns from being members. Accordingly, the only form of organization open to those banking houses which wish to have a seat on the Exchange is that of individual ownership, partnership, or the joint stock company.

THE JOINT STOCK COMPANY

The joint stock company is not a common form of organization in the United States, though well known in England and European countries. It differs from the partnership in that the capital is divided into a number of transferable shares, the ownership of which is a condition of membership in the company. As a rule, however, the members of the company are jointly and severally liable for the debts of the concern. Thus the unlimited liability feature of the partnership maintains. There are, to be sure, exceptions to this rule, particularly in England where limited liability of owners may be secured by legal process. Furthermore, it should be noted that the life of a joint stock company is not in any way dependent upon the life of the owners. This form of organization, therefore, provides the continuity of management which is secured by the corporate form.

The essential difference between the joint stock company and the corporation arises from the fact that (*a*) the former does not exist because of charter granted by the state, and

(*b*) the owners of shares are liable without limit for the debts of the company.

Some investment houses in this country are organized as joint stock companies, as well as many banking institutions, and formerly trading companies in England. Not long ago one of the best known private banking houses in New York, Goldman, Sachs and Company, changed from a partnership to a joint stock company.

THE DEVELOPMENT OF THE CORPORATION

From what has already been said, the relative importance of the corporate form of organization in the industrial world is sufficiently obvious. It is rather interesting, however, to note how recent has been the development of the business corporation. While the legal form was known centuries ago and can even be traced back to Roman history, the early corporations were usually municipalities, ecclesiastical bodies, or institutions of learning. Even toward the end of the 18th century, so keen a student of industrial questions as Adam Smith felt very dubious about the desirability of the corporate form of organization, or even the joint stock company, for the successful conduct of most types of industrial undertakings. In Book V of the *Wealth of Nations,* Smith writes as follows:

"The only trades which it seems possible for a joint stock company to carry on successfully, without an exclusive privilege, are those of which all the operations are capable of being reduced to what is called a routine, or to such uniformity of methods as admits of little or no variation. Of this kind is, first, the banking trade; secondly, the trade of insurance from fire, from sea risk and capture in time of war; thirdly, the trade of making and maintaining a navigable cut or canal; and, fourthly, the similar trade of bringing water for the supply of a great city."

Elsewhere Smith writes regarding the corporation:

"The directors of such companies, however, being managers rather of other people's money than their own, it cannot well

be expected that they should watch over it with the same anxious vigilance with which partners in private co-partnery frequently watch over their own. . . . . Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company."

Turning to the United States, we find that at the time of the formation of the Union there were only 21 corporations of all kinds in this country. These included, in the main, toll bridge and turnpike companies, water supply companies, corporations for improving inland navigation, and transportation, insurance, and banking companies. Until well on in the 19th century these were the commoner types of corporations until railroads began to be built, though New York state passed a General Incorporation Act in 1811. Following the Civil War there was a period of rapid increase in the number of industrial corporations, but the great majority have been organized within the last generation. It will be noted in Table 8 that in the 15-year period, 1904-19, the increase in the number of manufacturing corporations amounted to 40,419, or about 80 per cent. From this very hasty survey it can be seen that Adam Smith's forecast was in a measure justified by the facts of the following century.

A corporation may be defined as a *legal entity* composed of a number of persons associated together for the purpose of carrying on some kind of business. These persons are the stockholders who own transferable shares of the corporation. The stockholders elect a board of directors by majority vote, who in turn select the managing officers of the company.[1] The distinguishing feature of the corporation is the "authorization" which it secures from the state conferring upon it the right to exist and to do certain things directly specified in the authorization or not forbidden by it. This authorization is called

[1] Throughout the discussion of the terms "corporation" and "company" will be used interchangeably. Perhaps it should be pointed out, however, that while from the legal point of view a corporation is always properly referred to as a company, a company may not necessarily be an incorporated body. For example, the term "company" is used to refer to voluntary associations, joint stock organizations, and even to partnerships in certain connections.

a *charter* or sometimes a *certificate of incorporation*, or some similar term.

In earlier centuries, the charter was usually granted by the sovereign of the state as a royal favor. In the earlier times of our own industrial history, business corporations usually had to secure their charters through special legislative acts. In course of time, however, general business corporation laws were enacted in conformity with which most manufacturing and trading concerns could be incorporated without special legislative action. At the same time, there have ordinarily been special laws providing for the incorporation of banks and public utility companies of different sorts, as well as of insurance companies.

The corporate charter, which is ordinarily drawn up by the incorporators or by their attorney and which is then submitted for approval usually to the Secretary of State, may cover a wide range of subjects pertaining to the corporate organization, purpose, management, and the like. This charter may be likened to the "constitution" of a political body in accordance with which its future legislation must be guided. Once granted, the provisions of the charter can be altered only by special dispensation of the State, called for by the action of the stockholders. Normally the charter must at least have information on such points as the following:

1. The name of the corporation.
2. The purpose for which the company is organized.
3. The proposed amount of capital stock.
4. The type of stock to be issued and the rights of various classes of shareholders. This includes a statement of the par value of the stock.
5. The period of time for which the corporation is organized, if not in perpetuity.
6. The names and addresses of the incorporators.
7. The number and frequently the names of the first board of directors.
8. The location of the principal office of the company.
9. The name and location of the transfer office and "registrar," if any such have been provided for.

The internal management of the corporation is provided for by certain *by-laws* which are usually adopted at the first regular meeting and may customarily cover an almost unlimited variety of topics and can be changed at the will of the directors. Very infrequently the by-laws are outlined in the charter itself. This, however, is usually a distinct disadvantage. Such subjects as the following may be covered by the by-laws of a corporation:

1. The time, place, and manner of conducting meetings of the stockholders.
2. The methods of voting, providing for quorums, and the like.
3. Qualifications and duties of directors and officers.
4. The methods of election and term of office of the various chief officers of the organization.
5. The appointment of various committees of the board of directors.
6. The order of business at directors' meetings.
7. Restrictions regarding dividend declaration and similar provisions.

It is no doubt scarcely necessary to go into details regarding the advantages and disadvantages of the corporate form of organization, since these facts are now matters of common knowledge. Such advantages as the following, however, are commonly alleged.

(*1*) The corporation has continuous existence unless dissolved by the owners or limited in time in its original charter. (*2*) Because of the limited liability of the shareholders and the ready transferability of ownership, new undertakings are readily launched, since the original investor is not committed to the bitter end because of his earlier acts. (*3*) The corporation, more than any other form of organization, is in a position to raise capital for large undertakings. This is possible for a number of reasons, among others (*a*) because an appeal can be made directly or indirectly to the great body of small savers who can invest moderate amounts in the securities of the cor-

poration, and (*b*) it can safely obligate itself for a long period of years. (*4*) Beyond a doubt the corporate form of organization attains greater flexibility in financing than any other form. (*5*) It is sometimes true that a business organized as a corporation has a better opportunity to secure mobility and efficiency in management than other types of business organization.

On the other hand, a number of objections may be urged against the corporation as a form of business organization.

(*1*) The very ease with which capital can be secured by means of the corporation frequently leads to unjustifiable speculation and economic waste. (*2*) The corporate form frequently deprives management of that close personal relationship which is essential to the most effective conduct of industry. (*3*) The tendency toward great size in industrial enterprises has been unduly facilitated by the corporate form of organization. This is particularly true so far as mergers and combinations of different sorts are concerned. Frequently, only economic loss has resulted from "stock jobbing" made possible by this easy vehicle of finance. (*4*) It is possible for shrewd and unscrupulous men as well as for able men to secure control of corporations by the use of unethical methods which would not be possible under other forms of organization. (*5*) Another serious difficulty sometimes arises, particularly in the case of corporations in which the ownership is not widely distributed. As a result of the death of an original owner, or perhaps because of his financial necessities, some of his stock may pass into the hands of individuals whose presence in the corporation may be highly undesirable or perhaps even a distinct menace to the successful conduct of the business. (*6*) The corporation is subject to increasingly high burdens through the imposition of special taxes and fees of different sorts which are not imposed upon other forms of business organization. (*7*) There is an increasing amount of public regulation and interference with corporations, which not only occasions great expense, but also results in much undesirable publicity that could perhaps be avoided under some other form of ownership.

LACK OF UNIFORM CORPORATION LAWS

In passing, it should perhaps be mentioned that concerns wishing to incorporate in the United States are sometimes confronted with a rather puzzling situation because of the wide diversity of laws found in the various states from which charters must be secured. Such difficulties are, of course, eliminated in a country like England where all charters are granted by the central government.

It should be explained that a company may be incorporated in a state in which its major business is carried on or in some other state. All corporations chartered in a given state are in that state called "domestic" corporations. A company not chartered in the state where its plant is located is from the legal point of view a "foreign" corporation, frequently subject to certain special taxes and restrictions not imposed upon "domestic" corporations. This state of affairs is absurd and confusing and frequently productive of much economic waste. However, it is one of the blessings of a democracy combined with a federal form of government in which the rights of its constituent parts—the states—must be upheld at all costs.

For certain matters of routine in connection with incorporation there are no fundamental differences between different state laws. For example, it is common to require the new company to have three or more directors who usually must own one or more shares of stock in the corporation. The *minimum* amount of capital with which a corporation can be organized is also commonly specified.[1] This is fixed at $500 in the state of New York, and at $2,000 in New Jersey, while $1,000 is a frequent figure. It will be found, therefore, that there is a very large number of small corporations in the United States, many of which might doubtless better be carried on as individual enterprises were it not for the fact that the owners wish to avoid the unlimited liability which comes from that form of operation.

[1] In rare instances a *maximum* is also set. The state of Michigan formerly set its maximum limit at $50,000,000.

In this connection, it is rather significant to find that out of more than 200,000 corporations in the United States reporting net income for the year 1919, not more than 25 per cent returned an invested capital in excess of $100,000. For these smaller corporations, therefore, the place of incorporation is relatively unimportant. In the case of larger concerns, however, which plan to do business in several states, such questions as the following are frequently raised:

(*1*) How liberal can the charter be as to the scope of operations permitted to the corporation? (*2*) What limitations, if any, are imposed on the amount of indebtedness which can be incurred, relative to the stock outstanding? (*3*) What restrictions, if any, are imposed upon the classes of stock which can be issued? (*4*) What restrictions are imposed upon the method of payment for stock? (*5*) Must an office be maintained within the state which grants the charter? (*6*) Is the company permitted to hold stock of other corporations? (*7*) Are the tax burdens excessive? This will apply to the initial incorporation fee, the annual franchise tax, taxes on the transfer of stocks, and the like. The question of the treatment of *foreign* (*i. e.* those chartered in another state) corporations by a given state is also very significant in this connection. (*8*) How much publicity is imposed upon the corporation in the way of annual or more frequent reports to various state officials? (*9*) What has been the general attitude of the state courts toward business corporations?

Such questions as these and many others may properly be raised by the larger concerns. A study of the various laws indicates that some states have made a particular effort to induce companies to incorporate under their jurisdiction. New Jersey was formerly a very popular state, in which, no doubt because of its proximity to New York, many of the largest corporations in the United States are chartered. Since the passage of the "Seven Sisters Act" in 1913, however, the state has no longer been so attractive. In the eastern part of the country, Delaware and Maine still offer many inducements, while in other sections of the country, Arizona, Nevada, and South Dakota were formerly favorites, as well as West Vir-

ginia. On the other hand, it is well for a foreign corporation to avoid such states as California and Minnesota which attempt to impose a double liability on the stockholders of corporations to which they have granted charters, even though the business may be wholly carried on in other states.

Upon the whole it may be said that questions of this sort, while having a very important financial bearing, can best be settled by the lawyer. It is a safe rule for a business to incorporate in that state where its plant is located or the major part of its operations are carried on, unless some feature of the state law seriously interferes with the plan of organization or effective conduct of the business.[1]

Perhaps further light upon the question may be derived from the following table of organization expenses and franchise taxes:

[1] It is interesting to note that in the state of Arizona, incorporation costs less than elsewhere. The actual incorporation fee charged for any company was until recently only $10, irrespective of the amount of capitalization. Further, no annual franchise taxes were imposed by the state; no public statement of accounts required; no limitation on the number of shares issued; and no restrictions as to the amount or method of payment for shares before the company would be allowed to operate.

A legal organization, the function of which is to assist individuals in the formation of corporations under the most advantageous conditions, recently pointed out the specific advantages to be enjoyed under the Delaware corporation laws, emphasizing the fact that the advantageous features of the law have not been offset by radical legislative changes or by increasing tax rate. Also the point was stressed that organization fees and annual taxes in Delaware are now lower than they were at the time when its modern corporation law was enacted in 1899. The following arguments in favor of incorporating under the Delaware laws are mentioned:

1. Shares may be issued with or without par value.
2. Low initial cost; small annual franchise tax.
3. Short and simple procedure for organization.
4. Any power except banking and insurance may be obtained under the General Law.
5. Voting rights of stockholders may be restricted to one or more classes of stock.
6. Stockholders' and directors' meetings may be held without the state.
7. Directors need not be stockholders.
8. Resident directors not required.
9. Disclosure of financial affairs not required in reports.
10. Stock held by non-resident individuals or corporations exempt from taxation of any kind.
11. Personal property tax not assessed on corporations not doing business in the State.

TABLE 9

Comparative Statement of Organization Expenses and Annual Franchise Taxes (*Par Value Stock*)

A. Organization Expenses, Etc.

Capital Stock of Company	Delaware	Maine	Mary-land	New Jersey	New York	South* Dakota
$1,000	$25	$27	$ 40	$40	$45	$20
5,000	25	27	40	40	45	20
10,000	25	27	40	40	45	20
25,000	25	67	40	40	47.50	20
50,000	25	67	40	40	60	30
100,000	25	67	40	40	85	30
500,000	65	67	120	115	285	40
1,000,000	115	117	220	215	535	60
5,000,000	365	517	820	1,015	2,535	220
10,000,000	615	1,017	920	2,015	5,035	300

B. Annual Franchise Taxes†

$1,000	$5	$5	$10	$1	$10‡	None
5,000	5	5	10	5	10	"
10,000	5	5	15	10	10	"
25,000	5	5	30	25	25	"
50,000	10	5	55	50	50	"
100,000	10	10	80	100	100	"
500,000	25	50	120	500	500	"
1,000,000	50	75	150	1,000	1,000	"
5,000,000	150	275	350	4,000	5,000	"
10,000,000	275	525	600	4,250	10,000	"

*Organization tax only; other fees depend on length of document.

†On issued stock only.

‡Or 4½ per cent of entire net income apportioned to New York business.

THE VOLUNTARY ASSOCIATION

Another form of organization which has very recently found favor in many parts of the country is known as the "Massachusetts Trust" or *voluntary association*. This may be defined as an association of persons with a combined capital represented by transferable shares for the purpose of carrying on a common project for gain. The voluntary association has been held in the Massachusetts courts to be "a business partnership

organized in the form of a trust." The organization is created by filing with the properly constituted state authority a declaration of indenture or trust. By this form of organization, property is transferred to a board of trustees. Transferable certificates of ownership are then issued by the "company." These can be bought and sold after the manner of ordinary stock certificates, the owners frequently not realizing the difference between voluntary associations and corporations. It should be particularly noted that the voluntary association does not exist by reason of any charter granted by the state and hence is not a legal entity and not as a rule subject to the usual restrictions and limitations which are imposed on incorporated bodies. It has frequently been held that the liability of the shareholders is limited to the value of their shares, and the articles of association have, in similar manner, limited the liability of the trustees to the value of the property held. The legal status of this aspect of the voluntary association is still far from settled.

While this form of organization has been most common in the public utility field and real estate ownership in Massachusetts, it has gradually spread into other states and is now being resorted to frequently by concerns which, it has sometimes been charged, wish to "obtain the advantages belonging to corporations without the authority of any legislative act and with freedom from restrictions and regulations imposed by law upon corporations." Generally, this "common law trust" is free from the tax burdens imposed upon corporations as such, both state and federal, as well as from the publicity which usually attaches to the corporate form of organization. In most states there have been no court decisions on the matter and in absence of legislation or decision to the contrary, this form of organization must be regarded as legal. In 1912 the Massachusetts Commissioner of Corporations summed up as follows some of the advantages claimed for the voluntary association, which, at the time, was rarely met with among industrial concerns:

"1. These associations have been found by the experience of 25 years to be a convenient, safe and unobjectionable method

of cooperative ownership and management. They are for the interest alike of the investor and the public.

"2. The form of organization ensures a continuity of management and control which appeals strongly to investors in real estate, which cannot be secured by a corporation with changing officers. The trustees who are the managing officers of a trust are not so likely to be changed as are the directors of a corporation.

"3. It affords a more economical and more convenient and flexible form of management than does a corporation. Trustees can transact business with more ease and rapidity than directors.

"4. Such associations offer a convenient method of combining capital for the development and improvement of real estate. All the more important buildings erected in the city of Boston within the last 25 years owe their existence to such organizations.

"5. It enables the small investor to participate in ownership of valuable real estate, and share in the profits.

"6. These associations assist materially in the growth and prosperity of the community in which they operate. They furnish improved facilities for doing business and increase the amount and taxable value of property therein."

It will be noted that the Tax Commissioner had "real estate trusts" particularly in mind when this report was made. It is further interesting to find that he did not by any means regard this form of organization as an unqualified blessing, as indicated by the following statement:

"This particular class of associations is unobjectionable as long as the number of its members is limited, and the public is not asked to purchase its shares. In this form it partakes of the nature of a close corporation in which the members are actively engaged in the management of its affairs, and are in touch with its financial standing. But in the case of those associations which seek capital in the open market the case is different." [1]

[1] Massachusetts, *House Document* 1646, pp. 19-20, 1912.

These investigations resulted in no legal changes of particular significance so far as the voluntary association is concerned.

TRUSTS AND HOLDING COMPANIES

Of numerous other forms of organization which are of historic or present interest, mention should be made of the so-called *trust,* a form of business organization common in the United States before the passage of the Sherman Anti-Trust Act in 1890. The purpose of this "business" or "combination" trust was to control through central administration the operations of a number of naturally competing concerns. In accordance with the plan devised, stockholders of the different business units would transfer a controlling part of their shares to a board of trustees, who would give in exchange trust certificates. In this manner the advantages of actual legal consolidation could be secured without assuming the legal liabilities imposed upon the corporation. For legal rather than economic reasons this form of organization had to be abandoned, and the *holding company* in essential respects took its place.[1]

The "holding company" may be defined as a corporation formed for the purpose of controlling other corporations through the ownership of the major part of their stock. In this manner, since only 51 per cent of the stock or even less need be owned for purposes of control, it may frequently be possible through a sort of pyramiding of intermediate companies for a company with relatively small capital to control vast enterprises.

A large proportion of the public utility companies and many manufacturing concerns of the United States are owned or controlled by holding companies. The combinations thus effected may be either "horizontal" or "vertical." In the former

[1] The student should not confuse this form of organization with the *voting trust,* which is normally only a temporary expedient affecting the management of only *one* corporation, which is laboring under financial difficulties.

case there is a linking up of concerns engaged in a similar type of industry, while in the latter, sometimes called "integration," there is a union of concerns engaged in successive stages of an industry. Outstanding examples of powerful holding companies are the United States Steel and American Telephone and Telegraph Companies. The former is perhaps the best example of a company which is both integrated and horizontally combined. It not only owns ore beds but also railroads and steamship lines, as well as smelters, foundries, rolling mills, and the like. The American Telephone and Telegraph Company, while being primarily a horizontal combination, also owns its great manufacturing plant, the Western Electric Company, which in turn owns or controls several manufacturing and trading companies.

The holding company is a legal form of organization in a large number of states, though under the common law it was formerly not allowable for a company to own stock of another company. Some of the advantages claimed for the holding company are as follows:

(*1*) It provides an effective and flexible method of controlling several corporations for a common end. (*2*) It is an easy method of perpetuating the control of a given individual or financial group. (*3*) It makes possible the freer utilization of capital, by permitting the capitalization of the controlling stock interest. (*4*) The commonly alleged financial advantages of centralized control are gained. These will be noted more fully in a later chapter.

Under this head perhaps the most significant gain is due to the fact that the parent company can frequently borrow more advantageously than the constituent companies. This may be true (*a*) because of the size of the holding company and the fact that it is well known, further (*b*) the holding company may derive its income from a number of different and widely distributed sources and as a result may attain greater financial stability than the separate companies in their individual capacity. This advantage applies particularly in the case of certain public utility holding companies.

(5) Another advantage frequently claimed for the holding company is that such organizations are in a better position to deal with the general public than are separate companies. This may perhaps be particularly true in the case of public service holding companies which sometimes have a broader outlook than the local constituent companies.

SUBSIDIARY COMPANIES

Mention should also be made of some of the reasons for the creation of *subsidiary* companies.

1. Frequently it is claimed that there is a particular advantage gained by the formation of subsidiary companies controlled through a central holding company due to the fact that by the policy of having a number of separate companies organized in different states, it is frequently possible to avoid the effects of hostile legislation relative to foreign corporations.

2. Subsidiary companies are also developed or purchased by the parent company for the purpose of performing some particular work, as for example, the utilization of by-products, or perhaps for conducting the purchasing or selling operations of the parent company, or for handling its real estate. They may also be forced to conduct experiments of a sort which might entail too much risk for the parent company, or to supply particular materials.

3. Further, by the creation of a subsidiary company it may sometimes be possible for the parent company to avoid the restrictions imposed by an earlier mortgage, so drawn as to apply to the "after acquired" property of the company. There are times when it may be distinctly disadvantageous for the company from the financial point of view to be compelled to subject recently acquired property to the lien of an already existing mortgage. Such a limit imposed upon the company's methods of financing may at times work a direct injury upon the security holders in whose supposed interest the restriction was originally imposed. To be sure, the reason for evasion is not necessarily such as has just been indicated; it may be for

purposes of manipulation. However, recent mortgage restrictions are usually so phrased as to limit the incurring of indebtedness by subsidiaries as well as to impose upon them limits in a manner similar to those imposed upon the parent company.

4. Sometimes new official positions can be created through subsidiaries for faithful employees, or perhaps an opportunity in this manner may be afforded for employees to invest in the company's securities. This, however, is not a common or probable reason for the formation of subsidiaries.

5. At times it is perfectly apparent that the new subsidiary company is organized with a view to preventing further financial losses in an already harassed concern, or to conserve a portion of the assets of the parent business so that they may be utilized to pay off liabilities already incurred. Many a recent incorporation has been made in order to avoid financial disaster—not because the owners wished to launch a new enterprise!

6. Finally, subsidiaries are sometimes formed apparently for purposes of financial manipulation. It may be that the credit of the parent company has been impaired or perhaps there is a desire on the part of the management to speculate along certain new lines. In the latter case, it might not be advisable to risk the assets of the parent company.

In certain instances, therefore, there may be very sound financial reasons for this multiplication of corporations, while, in other instances, their creation is doubtless a matter of temporary expediency or even of sentiment.

Another form of organization which has been of little significance in the past, but which has grown rapidly in importance is the *cooperative* "society" or "association." Cooperative enterprises, generally speaking, are formed by groups of men interested in the same line of activity with a view to the more effective conduct of their particular business. Such organizations are fairly common in the dairy products business, and among the fruit growers in western states. Usually these associations have aimed at "marketing" rather than "production"

of goods, though there are in foreign countries a few well-known examples of cooperative factory enterprises. Cooperative credit organizations are becoming increasingly common among small tradesmen, and it is well to remember that most of the larger life insurance companies, as well as the savings banks, have the *mutual* form of organization.

Passing mention should perhaps be made of the recent anomalous situation created by the federal tax laws in accordance with which the question of incorporation frequently became, for certain types of small and even medium-sized concerns, a matter of temporary calculation of tax bills rather than a long run economic or financial policy. Since for unincorporated concerns the income taxes are assessed to the individual owner, it was frequently advantageous up to a certain point for a business to remain unincorporated in order to avoid the payment of the high excess profits taxes which had to be paid by corporations whose net income was large in proportion to the amount of invested capital. There have been instances when the form of organization of a given concern has been more than once shifted in order to reduce the tax burden. Accountants have thrived on the situation thus created by our federal tax legislation.

LIMITATIONS OF THE CORPORATE FORM

Finally, while it must be admitted that the corporate form of organization has apparently made possible a rapid industrial development in the United States, and while it would have been utterly impossible to finance many modern undertakings without this device, it is probable that too much enthusiasm has been displayed for the corporation as such. There are not, comparatively speaking, a very large number of businesses which really need public financing. By far the greater number of corporations are closely owned, in fact many are so *closed* that the entire ownership is in the hands of only one individual. Probably, if the large and nationally known corporations were eliminated, it would be found that the number of

shareholders in the average industrial corporation would not be too great for comfortable partnership agreement. It is also probable that the affairs of these corporations could be just as effectively carried on without incorporation. Thus a number of unnecessary expenses might be saved, and equally efficient management could be secured if the partners would hire suitable outsiders when necessary. In these narrowly owned concerns the stockholders are virtually partners so far as their *personal* relations are concerned, and the legal fiction of a corporation does not change their status. In such cases, also, the question of continuity of operation could just as readily be provided for through a properly framed partnership agreement. A striking present-day example of an individually owned corporation is the Ford Motor Company. The Baldwin Locomotive Company was, until its incorporation in 1909, an outstanding example of an old, large, and successfully operated partnership.

The larger the business unit grows, the more danger there is that hostile or at any rate unsympathetic individuals may begin to have a voice in the management of a corporation the stock ownership of which is readily transferable. This frequently leads to serious friction and a dilution of interest—all of which means economic waste. If the concern grows large enough to have its stock publicly traded in, the management begins to find it necessary to reckon with a host of considerations wholly foreign to sound financing. Thus effective operation is interfered with. On the other hand, many a small concern hides behind its charter in order to protect one or two inefficient owners and operators who fear that the business may not prove successful and who wish accordingly to limit their losses in case of failure. Such a state of affairs as is here indicated is not conducive to the production of the highest degree of utility either for large or small business units.

Note. Parker's *Corporation Manual* should prove of much value to one who wishes to look further into the legal aspects of this and the following chapter.

CHAPTER V

THE INSTRUMENTS OF LONG TIME FINANCE—STOCKS

"Capital," "capital stock," "capitalization" and "invested capital"—Volume of new security issues—Types of common stock issues—Characteristics of common stock—No par value stock and the reasons for its issue—Growing importance of no par value stock—The significance of preferred stock—Characteristics of preferred stock—The callable feature and reasons therefor—Protective provisions and their nature—Miscellaneous aspects of stock issues—Voting provisions.

INASMUCH as most large industrial concerns are incorporated, and since there appears to be an increasing tendency toward this form of organization, it is necessary at this point to give brief attention to the securities of different types ordinarily used for permanent corporate financing. These instruments of finance may be roughly classified as *stocks* and *funded debt*, including bonds and notes. The former represent the owners' interest in the business, while the latter represent the creditors' claims upon the company. Under each group of securities, numerous classifications and sub-classifications may be made. Before examining some of the more important features of stocks and bonds, however, it may be of interest to call attention briefly to the volume of securities at present issued in the United States by business corporations of the various types.

Perhaps one point frequently misunderstood by the beginning student and the general reader, should be made clear before further discussion. This has to do with the confusion which commonly exists regarding the meaning of the terms *capital, capital stock,* and *capitalization.* "Capital" is used loosely with a wide variety of meanings. To the economist it usually signifies tangible instruments of production, that is, physical goods used in the creation of other goods or services.

The average man frequently thinks of "money" as capital and uses the terms synonymously. From all points of view this is a wholly unwarranted use of the term. In business parlance "capital" ordinarily means the investment in an enterprise which, from the legal point of view, may be thought of as represented by physical property and valuable intangible assets —the *corpus* of the business. It is in this general sense that the term will be used in succeeding discussions. It should be noted, however, that "capital" is frequently used by bankers and credit reporting agencies in the sense of net worth, or the unencumbered investment of the owner in the business.

"Capital stock" of a corporation may have no relation whatever to its "capital," for reasons which will presently be indicated. It merely indicates that the owners of the stock have a certain managerial and financial interest in the business, though there may be no relation whatever between the nominal value of the outstanding stock as carried on the books of the company for accounting purposes and the actual value of the property in question. It would be wholly possible, for example, for a concern with capital stock of only $100,000 to have an investment value of a million dollars or perhaps of practically nothing. The fact that capital stock has been issued by no means indicates that a certain amount of "capital" has been invested. It frequently represents only a hope—not a value. "Capitalization," on the other hand, is a word ordinarily used to refer to the sum of the outstanding stocks and funded obligations of the concern, which, as it will appear later, may represent wholly fictitious values. Sometimes the "earned" surplus of a company is also included in referring to its "capitalization."

The "invested capital" of 192,037 out of 320,198 business corporations in the United States, as reported by the United States Treasury Department at the end of 1919, amounted to $66,130,000,000, and it is highly probable that the actual "capitalization" of these concerns was at least $75,000,000,000. As explained earlier (see page 38) the total "investment" in business corporations in the United States, including stocks, bonds, and net surplus, is probably between $155,000,000,000 as a minimum and $175,000,000,000 as a maximum. For the year

1926, 359,449 corporations out of a total of 455,320, reported the following capital issues:

Common stock	$ 67,517,000,000
Preferred stock	17,146,000,000
Total stock	$ 84,663,000,000
Bonds and mortgages	21,801,000,000
Total—all securities	$106,464,000,000

Had the remaining corporations—almost 100,000—reported in full, the total security issues would probably have been between $130,000,000,000 and $140,000,000,000, of which more than $100,000,000,000 would be in stock. For the year 1925 somewhat more complete figures are available as follows for 424,391 corporations—

Common stock (par value only)	$ 64,338,000,000
Preferred stock (all companies)	16,752,000,000
Total stock	$ 81,090,000,000
Bonds and mortgages (all companies)	31,824,000,000
Total	$112,914,000,000

Assuming that the companies issuing no par common stock, or not reporting the value of common stock, maintained the same average ratio between preferred and common stock as those companies with *par* value common, making full reports, about $25,000,000,000 should probably be added to the common stock as above reported. This again would make the par value or nominal value of corporate security issues some place between $130,000,000,000 and $140,000,000,000.

Incidentally, the estimated "fair" value of the capital stock of 424,391 corporations reporting to the U. S. Treasury Department for the year 1925, was $95,150,000,000. Of this amount $11,767,000,000 was the estimated fair value of no par stock[1] reported by 18,771 corporations. The 376,606,721

[1] According to the ruling of the U. S. Treasury Department, the "fair value" of the capital stock of a corporation is—

"The estimated value of the entire outstanding stock of the corporation, considered as a going concern, giving due consideration to the present worth of the assets, tangible and intangible, the earning capacity, dividends disbursed, the market value of the shares and other factors which affect values generally." (See *Statistics of Income*, 1925, p. 30.)

shares of no par stock listed on the New York Stock Exchange, January 1, 1929, had a market value of $28,907,781,330.

Further interesting light is thrown on this problem by an examination of the accompanying table which lists annually over a period of 20 years the par value of securities authorized for new incorporations with authorized capital of $100,000 or more.

TABLE 10

Authorized Capital of New Enterprises Chartered with Authorized Capital of $100,000 or More, 1907-1926.[1]

(*Unit: $1,000,000.*)

1907	$2,545	1918	$ 2,470
1908	2,059	1919	12,679
1909	2,466	1920	14,999
1910	2,869	1921	7,959
1911	2,906	1922	8,400
1912	3,288	1923	9,371
1913	2,192	1924	7,225
1914	1,581	1925	9,881
1915	2,061	1926	10,947
1916	3,489		
1917	4,608	Total	$113,995

[1]*New York Journal of Commerce*, and *Statistical Abstract of the United States*, 1928, p. 309.

Had no par stock issues been included in later years, the total capitalization authorized would have been even higher than the huge amount indicated, which exceeds the entire reported capitalization of United States corporations. However, of the total *authorized*, only a small part is as a rule actually *issued* each year. Even in the case of authorized new issues of old companies the entire amount is not ordinarily issued at once, if at all. A comparison of the total authorized capitalization for the three years 1919-1921 ($35,637,000,000) with the new domestic corporate securities actually issued by new and old companies during the same years (see page 148) shows that the latter was less than 20 per cent of the former. Further, by far the greater proportion of the new issues were put out by old companies.

TYPES OF COMMON STOCK ISSUES

To return to the discussion of the different types of security issues, stocks may be generally classified as *common* and *preferred*. The former merely indicates ordinary privileges of

TABLE 11

Classification of New Corporate Securities Issued in the United States by Type and Industrial Groups, 1923-1928[1]

(Unit: $1,000)

Type of Security and Industrial Group	1928	1927	1926	1925	1924	1923
Long Term Bonds and Notes—						
Railroads	$ 505,689	$ 767,510	$ 351,738	$ 473,590	$ 809,084	$ 471,839
Public utilities	1,518,661	1,995,955	1,380,317	1,027,080	880,111	812,188
Iron, steel, coal, copper, &c.	186,452	172,175	219,665	114,696	190,610	302,375
Equipment manufacturers	7,215	22,615	25,159	11,256	15,160	11,860
Motors and accessories	5,800	52,350	67,750	78,400	20,775	26,850
Other industrial and manufacturing	381,236	546,421	352,833	276,687	170,963	197,478
Oil	75,000	354,400	259,950	108,400	31,910	99,800
Land, buildings, &c.	683,664	573,304	647,359	695,755	319,253	239,282
Rubber	1,300	70,000	6,750	34,565	400	2,000
Shipping	750	25,585	26,000	14,475	13,800	2,675
Miscellaneous	545,575	427,980	310,450	206,298	117,190	150,045
Total	$3,911,343	$5,188,297	$3,647,971	$3,040,203	$2,569,256	$2,316,394
Short Term Bonds and Notes—						
Railroads	$ 29,500	$ 20,150	$ 30,000	$ 24,900	$ 75,250	$ 19,087
Public utilities	135,682	139,622	105,980	148,820	128,073	64,675
Iron, steel, coal, copper, &c.	500	2,300	6,175	23,965	15,475	9,850
Equipment manufacturers	.....	1,200	.....	1,150	1,794	1,945
Motors and accessories	5,450	4,900	16,310	1,000	24,000	25,100
Other industrial and manufacturing	7,792	21,800	55,751	28,394	16,310	9,150
Oil	18,200	50,200	23,431	76,200	99,975	44,814
Land, buildings, &c.	38,970	40,304	27,707	26,592	5,320	1,330
Rubber	.....	.....	32,250	15,000	.....	.....
Shipping	.....	8,625	500	12,500	.....	1,000
Miscellaneous	38,025	66,397	35,706	28,415	36,832	3,535
Total	$ 274,119	$ 355,498	$ 333,811	$ 386,936	$ 403,029	$ 180,487
Stocks—						
Railroads	$ 192,552	$ 175,145	$ 40,845	$ 16,218	$ 55,963	$ 27,322
Public utilities	979,181	850,927	488,154	549,134	521,456	261,533
Iron, steel, coal, copper, &c.	133,624	12,579	54,542	16,268	23,234	35,328
Equipment manufacturers	1,920	.....	5,628	1,360	2,062	.....
Motors and accessories	96,403	37,539	47,514	110,663	11,747	30,074
Other industrial and manufacturing	730,664	301,102	215,921	259,301	124,009	166,611
Oil	169,910	20,737	216,335	97,938	55,641	81,234
Land, buildings, &c.	86,729	55,081	61,099	30,310	10,928	11,548
Rubber	63,124	2,702	4,215	15,985	1,600	350
Shipping	20,401	.....	.....	7,445	.....	1,000
Miscellaneous	1,093,068	301,789	183,519	206,348	59,645	120,959
Total	$3,567,579	$1,757,602	$1,317,771	$1,310,071	$ 866,286	$ 735,959
Total—						
Railroads	$ 727,741	$ 962,806	$ 422,583	$ 514,709	$ 940,297	$ 518,249
Public utilities	2,633,525	2,986,504	1,974,451	1,724,034	1,529,640	1,138,396
Iron, steel, coal, copper, &c.	320,576	187,054	280,382	153,929	229,319	347,553
Equipment manufacturers	9,135	23,815	30,787	13,766	19,016	13,805
Motors and accessories	107,653	94,789	131,574	190,063	56,522	82,024
Other industrial and manufacturing	1,119,692	869,323	624,505	564,382	311,283	373,239
Oil	263,110	425,337	499,716	282,538	187,526	225,848
Land, buildings, &c.	809,363	668,690	736,165	752,658	335,501	252,161
Rubber	64,425	72,702	43,214	65,550	2,000	2,350
Shipping	21,151	34,210	26,500	34,420	13,800	4,675
Miscellaneous	1,676,668	976,166	529,675	441,061	213,667	274,539
Total corporate securities	$7,753,040	$7,301,397	$5,299,554	$4,738,110	$3,838,571	$3,232,840

[1]Based on figures published by the *Commercial and Financial Chronicle.*

ownership and presumably the greater risks of ownership, while the latter carries with it certain distinctive features not enjoyed by the "common" stock. Ordinarily, common stock always carries with it the right to manage the corporation's affairs through the exercise of the voting privilege by the stockholder.[1] It is entitled to *dividends,* if earned, after all operating expenses have been met, fixed charges have been paid, and senior security holders have received their interest or preferred dividends. This stock may or may not represent actual value paid into the company by means of money, physical property, securities, or services.

Until recently, practically all common stock was issued in shares of a definite par value specified on the stock certificates themselves. This par value has been in the majority of cases $100. In most states, however, an industrial concern may make the par value of its common stock any amount which it wishes, in the absence of definite legal restrictions depending upon the class of investor to whom an appeal is made for funds. A par value of $25 is found in many of the copper stocks. In miscellaneous mining companies, a par value of $10, $5, or even $1 is frequently met with, while there are cases on record of questionable oil companies putting out blocks of shares with a par value as low as one cent.

The stockholders of a corporation are not always required to pay in the full amount of the par value of their shares. For example, the original stockholders of the Calumet & Hecla Mining Company are said to have paid in not more than $12 per share (par value $25), though at one time the earnings of the company became so great that this stock sold at around $900 on the market, or 36 times its par value and 75 times the amount of money actually paid in by the owners. It should be borne in mind, however, that when the full par value of stock has not been paid in, either actually or by some legal fiction, the owner, who is legally liable to the extent of the par value of his stock, may, in case of a company's financial diffi-

[1] There are occasionally special types of common stock created which do not carry voting power, as, for example, the old class "B" stock of the General Motors Corporation.

Form 1, Insert I

COMMON STOCK CERTIFICATE

NY 78487 23608

INCORPORATED UNDER THE LAWS OF THE COMMONWEALTH OF MASSACHUSETTS

Number 000

Shares

THE GRATON & KNIGHT MANUFACTURING COMPANY

This Certifies that ____________________

is the owner of ____________________ fully-paid and non-assessable shares of the par value of TWENTY-FIVE (25) DOLLARS EACH OF THE COMMON CAPITAL STOCK of The Graton & Knight Manufacturing Company transferable upon the books of the Company in person or by duly authorized attorney upon the surrender of this certificate properly endorsed. This certificate and the shares represented hereby are subject to the laws of the Commonwealth of Massachusetts and to the agreement of association and by-laws of the Company a copy of which is on file with the Transfer Agent, and the clauses of the agreement of association printed on the back of this certificate are made a part hereof. This certificate is not valid until countersigned by the Transfer Agent and registered by the Registrar.

In Witness Whereof, The Graton & Knight Manufacturing Company has caused its corporate seal to be hereunto affixed and this certificate to be signed by its duly authorized officers on ____________

SPECIMEN
ASSISTANT TREASURER.

SPECIMEN
VICE PRESIDENT.

COMMON

REGISTERED:
THE MECHANICS NATIONAL BANK, WORCESTER, MASS.
(WORCESTER)
REGISTRAR.
By
ASSISTANT CASHIER.

COUNTERSIGNED:
THE GRATON & KNIGHT MANUFACTURING COMPANY.
(WORCESTER)
TRANSFER AGENT.
By

AMERICAN BANK NOTE COMPANY.

culty, be forced by the creditors to contribute the difference between the par value of his stock and the amount originally subscribed. Also, the corporation itself may assess the stockholders for the unpaid balance, unless the stock has by some legal device been made "fully paid." To avoid occurrences of this sort which might prove rather disagreeable to an innocent stockholder not aware of the legal provisions surrounding his stock, it is now customary for companies to issue their common stock as "fully paid" and "non-assessable," unless the laws of the state forbid. When such an agreement with the stockholder is made by the company he is no longer subject to "assessment," but he may find himself liable later to creditors of the company, provided it can be proved that actual value was not originally exchanged for the stock either in the form of property or services.

Stock not actually covered by money or other valuable property paid into the company, is sometimes referred to as "watered stock." This merely means that the *par* value of the outstanding stock of a corporation is in excess of any real value acquired by the company. It is irrelevant for present purposes to indicate the various methods whereby stock may be "watered." Suffice it to say that when new enterprises are launched or consolidations are effected, the promoter is usually paid in common stock which may have little or no present value, but will possibly be of great value in the future if the company's earnings are sufficiently satisfactory. Also, common stock is frequently given as a *bonus* along with preferred stock or bonds in order to induce investment in new enterprises.

Perhaps attention should be called to the fact that when, as a result of the growth of a company through reinvested earnings, the market value of the common stock becomes very high so that the stock cannot readily be purchased by the small investor, it is a not infrequent practise for the company to reduce the value of the individual shares by issuing in exchange for the original stock a larger number of new shares. This adjustment may be effected in three different ways:

1. New shares of a lower par value may be issued in such amount that the aggregate par value of the new shares will

equal that of the old. For example, 10 shares with a par value of $10 may be exchanged for one share having a par value of $100.

2. A greater number of shares of no par value may be issued in exchange for outstanding shares with a definite par value.

3. The actual "capitalization" may be increased by issuing new shares having the same par value as the old shares. In such a case the procedure would amount to paying a "stock dividend" or "capitalizing" the surplus of the company.

The latter method is perhaps most common, but in any event the immediate market price of stock can be cut down in this way without appreciably affecting the status of the original holder. Well-known examples of adjustments of this sort are afforded by the recent financial history of the Bethlehem Steel Corporation, The United Fruit Company, the Amoskeag Manufacturing Company, and some of the Standard Oil Companies.

NO PAR VALUE STOCK

Since so many uncertainties attach to the issue of stock having a definite par value, it has frequently been urged that industrial corporations should uniformly issue common stock *without par value.* Thus a stock certificate for a given number of shares would merely indicate that the owner is entitled to a certain portion of the unencumbered assets of the business, without any fictitious statement being made as to the money value of each share. Some of the arguments in favor of the issue of stock having only a nominal value and against the usual type of par value stock are as follows:

1. Since the par value of stock bears no relation either to the *market value* or the *book value* it is misleading and untruthful to state on a stock certificate that it is worth a given amount.

2. All of the difficulties and subterfuges resulting from the necessity of making stock fully paid are eliminated, since *no*

Form 2, Insert II

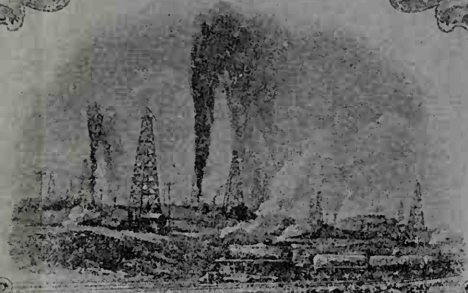
CERTIFICATE OF STOCK WITHOUT PAR VALUE

88207

100 SHARES

Number 00000

Shares 100



INCORPORATED UNDER THE LAWS OF THE COMMONWEALTH OF VIRGINIA.

INVINCIBLE OIL CORPORATION

THIS CERTIFICATE IS TRANSFERABLE EITHER IN NEW YORK OR BOSTON.

This is to Certify *that* ______________________

is the owner of ——— ONE HUNDRED ——— *fully paid and non assessable shares, without nominal or Par Value, of the capital stock of Invincible Oil Corporation (herein called "Corporation"), transferable on the books of the Corporation in person, or by duly authorized attorney, upon surrender of this Certificate properly endorsed. This Certificate is not valid until countersigned by the Transfer Agent and registered by the Registrar.*

In Witness Whereof, the Corporation has caused its seal to be hereunto affixed, and this certificate to be signed by its duly authorized officers,

SPECIMEN — ASSISTANT SECRETARY.

SPECIMEN — VICE PRESIDENT.

REGISTERED: THE FIRST NATIONAL BANK OF BOSTON, REGISTRAR. By ASSISTANT CASHIER.

COUNTERSIGNED: STATE STREET TRUST COMPANY (BOSTON) TRANSFER AGENT. By ASSISTANT SECRETARY.

AMERICAN BANK NOTE COMPANY

par stock can, as a rule, be sold at any price determined upon by the directors of the corporation.

3. The issue of stock of this type provides for greater flexibility in financing, inasmuch as it is possible for a company to sell its shares at different prices, depending upon general financial and business conditions, without having public attention directed to the matter. Further, it is possible for a perfectly sound concern to sell its "no par" shares at a price attractive to the investor, whereas it might cause much unfavorable comment if shares having a definite par value were sold at a discount.

4. From the point of view of the stockholder himself it is significant that when no par stock is issued he is free from the liability to assessment sometimes confronting the holder of par value stock which has not been fully paid, or about the nature of the payment for which the courts raise serious objections in times of financial difficulty.

5. The elimination of a fictitious par value will safeguard the innocent investor, who is frequently persuaded by speculators to buy stock selling at a nominal price on the assurance that it is worth much more than he is paying for it. Indeed, many a man or woman ignorant of financial matters, has been induced to buy for a few dollars per share, stock which is perfectly worthless, but which carries on its face the statement that the value is $100 or some such amount. It is easy under these circumstances for the swindler to convince his victim that a rare bargain is being offered and that a stock will soon be "brought to par."

6. Finally, it is urged that the use of no par stock will permit much greater flexibility and accuracy in accounting procedure, since there are a number of perfectly satisfactory methods for carrying such issues on the balance sheets.

Against these and similar advantages, certain rather vague difficulties are sometimes weighed. The counter arguments are as a rule based mostly on prejudice or a failure to understand the purpose of no par stock. Some of the commoner arguments of this sort are as follows:

1. The use of no par stock is a clever device to permit stockholders to escape their lawful liability, and would therefore, weaken the credit of the company.

2. The issue of such stock will make for a reckless output of securities which will lead to dangerous speculation.

3. From the point of view of scientific accounting the lack of standardization in the balance sheets of corporations using no par stock is a distinct drawback.

In reply to this last argument, it must be admitted that no par stock can be carried on the books in a number of different ways. The various methods used are to carry the stock (*a*) at the original issue price, (*b*) at an arbitrarily fixed price, (*c*) at its book value (found by dividing the net worth of the company by the number of shares outstanding), and (*d*) at the market price. The first and second methods are probably the more common and some attention will be given to this matter in a later chapter.[1]

The various arguments when carefully weighed seem to point unmistakably to the desirability of issuing common stock of no par value by industrial corporations, though there are no doubt some definite objections to the use of such securities in the case of banks and public utilities. New York, in 1912, was the first state to pass a law permitting the issuance of shares without par value. Between 1915 and in 1921, 22 states passed statutes legalizing common stock with no par value under certain conditions, and in the next 6 years 15 additional states enacted similar legislation. In 30 of these states it is permissible to issue preferred as well as common stock of no par value.[2]

[1] The General Motors Corporation formerly carried its no par common stock at the theoretical issue price, 10 shares of the no par having been issued in exchange for old common stock with a $100 par value. The Famous Players Lasky Company in 1921 apparently carried its no par stock at the market price for balance sheet purposes. The Island Creek Coal Company, on the other hand, gave its no par stock a nominal value of $1 per share on the books, though the book value at the time amounted to about $100 per share.

[2] The following states in 1927 permitted the issue of both preferred and common no-par stock: Alabama, Arizona, Arkansas, Connecticut, Delaware, Florida, Idaho, Kansas, Louisana, Maine, Maryland, Massachusetts, Minnesota, Missouri, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Vermont, Virginia, Washington, and West Virginia. At the same period the following

On August 1, 1928, almost 40 per cent (443) of all stock issues listed on the New York Stock Exchange were no par, and 53 per cent of all shares excluding railroads. Many issues with a definite par value have recently been changed to no par, and the present tendency is decidedly away from common stock with a stated par value.

Most of the laws passed have been so framed that the commonly alleged objections are safeguarded against. Even though permissible, the use of no par preferred stock is comparatively rare. If such stock is to be regarded as an "investment security" it is probably desirable to retain the definite par value and attempt to keep real values back of it, though the preference as to principal could just as well be provided arbitrarily, without fixing a definite par value. It should be noted, however, that in one or two states the law requires that if common stock of no par value is issued, the same corporation must, if it issues preferred stock, make it also of no par value.

In all states, banks are incorporated under special laws and to the writer's knowledge are not allowed to issue stock having only a nominal value. The same rule in general applies to insurance companies. The undesirability of any change in the law, so far as banks are concerned, is obvious when one recalls the usual double liability provision applying to holders of bank stock, that is, they are liable to the bank's creditors, in case of failure, to an amount equal to twice the par value of the stock.

Public utility corporations in a large number of cases are also incorporated under special laws. In a number of states, however, the issue of stock without par value is permitted to public utility concerns as well as to general business corporations. This permission has already been made use of by some public utility companies, and no doubt with considerable advantage, since the use of no par value does away with the practise of issuing stock at a discount.

On the other hand, it is pretty generally urged that because of the peculiar nature of the public service corporation and its

additional states permitted no-par common issues: California, Colorado, Georgia, Illinois, Indiana, Michigan, Ohio, and Wisconsin.

regulation by state commissions, the stock issued must be fully paid for in money or fairly valued physical assets. Hence the par value of such stock really means something to the investor, and to do away with this feature might lead to many new difficulties. Incidentally, there is a possibility that, for rate-making purposes and for regulating the return on investment of local public utility corporations, it might be necessary for commissions to rely more completely on physical valuations than in the past if stock without par value were generally issued. At any rate, this fact was recently much stressed by the Massachusetts Department of Public Utilities in its opposition to the enactment of a law which would enable public service corporations in the future to issue stock having only a nominal value.

PREFERRED STOCK

Preferred stock is a somewhat more complicated instrument of finance than is sometimes realized. The first and outstanding characteristic which ordinarily distinguishes preferred from common stock is the fact that a share of preferred carries with it the right to a fixed rate of dividend, commonly 7 per cent or more in industrial issues, which is to be paid to the owner before any dividends are given to the common stockholders. Usually, also, this dividend is *cumulative*, namely, if the corporation fails to earn enough to pay the dividend at any specific period, the owner of the stock has a legal right to the unpaid dividends and his claims for dividends must be met before any common stock dividends can be paid.[1] There are instances on record when such "accumulated" back dividends have been almost equal to the par value of the stock outstanding. A well-known example of this predicament is furnished by the International Mercantile Marine Company.

In return for his "preference," the holder of preferred stock is ordinarily given no voting power which will enable him to

[1] Of 125 preferred stocks listed on the New York Stock Exchange early in 1921, 110, or 86 per cent, were cumulative as to dividends, while 158 out of 168 issues put out in 1920 had the cumulative feature.

have a voice in the management of the corporation. However, it is also commonly understood that in case of liquidation of the company, the preferred stock will have *preference* as to the assets of the company, that is, the preferred stockholder will receive back his principal, after creditors are paid, before the common stockholder is entitled to anything. It is further almost universal to safeguard the position of the preferred stockholder by giving him the right to exercise voting power, which is either exclusive or may be shared with the common stockholders, provided the company defaults in payment of dividends for a certain length of time. This period varies from as short a time as six months to a maximum of about two years, depending upon the stipulations provided in the stock indenture at the time of issue. Unless, however, the preferred stock is allowed to elect a majority of the board of directors in such cases, the voting privilege may be mere form rather than substance.[1]

It must not be supposed, however, that all preferred stock issues closely follow the above-mentioned provisions. There are also issues of *non-cumulative* preferred stock. Such a stock confers on the owner a prior right to dividends over the common stockholders. Arrears in dividends, however, do not accumulate for the owner's benefit. While this form of issue is more common in the case of railroad companies, it is also found occasionally in industrial corporations, largely as a result of reorganization procedure, though from the investors' point of view it seems to possess no merits whatever. This non-cumulative preferred stock is not usually given voting power even when dividends are not paid. Hence, the common stockholders may, if they choose, fail to declare dividends on both classes of

[1] From the study by Mr. Keister, referred to on page 99, it appears that out of 157 new preferred stock issues serving as the basis of examination and issued between 1916 and 1921, 20 per cent had full voting power, while 25 per cent were given no voting power of any sort under any circumstances. The remaining 55 per cent carried conditional voting power under such circumstances as have been above indicated. A recent issue of preferred stock of the Greenfield Tap and Die Corporation provided that each share of preferred stock would be entitled to four votes in case the company should default in the sinking fund payments or in the payment of preferred stock dividends for more than one year.

stock until such time as the common stock will be in a very strong position and receive dividends at an unusual rate, while the owners of the non-cumulative preferred may then be entitled merely to the stipulated rate of dividend without any compensation for the dividends which have been passed. Under such circumstances the market position of the common stock may be more favorable than that of the preferred. A good example is afforded by the Erie Railroad which has outstanding $151,000,000 par value of common stock and about $48,000,000 of 4 per cent, non-cumulative, first preferred. Neither stock has paid dividends for more than 20 years. However, a recent court decision on the Wabash Railroad case indicates that holders of non-cumulative preferred stock may be entitled to dividends, if *earned,* even though not paid till a later date. (The case will probably go to the Supreme Court.)

It is further interesting to find that some issues of preferred stock normally carry voting power along with the common. This was true, for example, of the preferred stock of the Famous Players-Lasky Corporation. Also, occasional issues of preferred stock are to be found which carry with them a *participating* provision, whereby the preferred stock is entitled to share with the common in any further dividend disbursements after a certain amount has been paid on the latter. This *participation* feature may provide for an equal sharing with the common in additional dividends or may limit the amount to a certain definite percentage.

Two other common provisions of preferred stock issues should be mentioned. In the first place, it is customary to provide that the issuing company may, at its option, redeem the preferred stock after a definite date either in whole or in part, or in lieu of this, to provide for a gradual compulsory retirement of the stock out of a sinking fund specifically created for the purpose. Stock bearing such provisions is designated as *callable* or *redeemable.* By either method the stock can usually be retired only at a premium, unless purchased for less on the open market, which normally varies from 105 to 125, 110 or 115 being probably the more common figure, though in recent years the higher limit is frequently found. The provisions are usually such that all the stock can be retired in from 10 to 20 years time, though the practise is by no means uniform.

Form 3, Insert III

PREFERRED STOCK CERTIFICATE

23147

THE FEDERAL RUBBER COMPANY

FIRST PREFERRED STOCK

Certificate No. 000

Shares

Issued to

Professor J. A. Crumb
(deflationary Crumb)

19

Received the above described Certificate

19

FIRST PREFERRED

CERTIFICATE FOR LESS THAN ONE HUNDRED SHARES

CERTIFICATE FOR LESS THAN ONE HUNDRED SHARES

NUMBER 000

SHARES $100 EACH

SHARES $100 EACH

THE FEDERAL RUBBER COMPANY

INCORPORATED UNDER THE LAWS OF THE COMMONWEALTH OF MASSACHUSETTS.

This Certifies that Mr. Wong. is the owner or registered holder of full paid and non-assessable shares of the par value of one hundred (100) dollars each of the FIRST PREFERRED capital stock of The Federal Rubber Company transferable upon the books of the Company in person or by attorney upon the surrender of this certificate, duly endorsed or assigned. This certificate and the shares represented hereby are subject to the laws of the Commonwealth of Massachusetts and to the Agreement of Association and By-Laws of the Company, and the clauses of the Agreement of Association printed on the back of this certificate are made a part hereof. This certificate is not valid until countersigned by the Transfer Agent and registered by the Registrar.

In Witness Whereof, The Federal Rubber Company has caused its corporate seal to be hereunto affixed and this certificate to be signed by its duly authorized officers on 19 .

COUNTERSIGNED,
THE NEW ENGLAND TRUST COMPANY,
TRANSFER AGENT,
By
SECRETARY.

REGISTERED,
THE FIRST NATIONAL BANK OF BOSTON,
REGISTRAR,
By
ASSISTANT CASHIER.

SPECIMEN
ASSISTANT TREASURER

By
SPECIMEN
VICE-PRESIDENT

TENS	UNITS
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0

THE CALLABLE FEATURE

An examination of 157 preferred stocks, 133 of which were industrial issues, put out between January, 1916, and May, 1921, reveals the fact that 90 per cent had the "callable" feature, nearly half being callable at 110. In about 80 per cent of these cases the callable provisions were *compulsory* and provided for by sinking funds. Of 125 issues of industrial preferred stock listed on the New York Stock Exchange, at the end of 1920, it appears that not more than two-thirds contained the callable provision and the proportion seems to have held at about the same figure in a group of 168 new issues put out in the year 1920. Of the listed issues, 22 per cent were callable at 105, and 58 per cent at 110. A study of the 1920 issues, however, discloses the fact that 24 per cent were callable at 110, 13 per cent at 115, more than 21 per cent at 120, and nearly 26 per cent at 125. Frequently no definite time limit is set for the retirement of preferred stock in accordance with the foregoing provisions.[1]

There may be a variety of reasons for including this "callable" feature in preferred stock covenants, some of which are inserted particularly for the benefit of the company while others more or less directly have the investors' interests or the security market primarily in mind. The following reasons may be cited:

1. The life of an industrial concern may be comparatively brief, and, at any rate, there may be a change in management before many years. Hence, the investor's interests will be better protected if he is assured that a certain proportion of the stock will be gradually retired out of the earnings. In this manner the stockholders' equities may be increased.

2. Frequently, preferred stock has been issued when the company was comparatively new and its credit not well established. Hence, it may be desirable later to retire the preferred stock, which in practise imposes a relatively high annual charge

[1] It is estimated that in the period 1919-1927 about 300 issues of preferred were redeemed, with a par value in excess of $900,000,000. Nearly half of this amount was called in 1927.

by way of cumulative dividend payments, and to substitute therefor common stock issues which give greater flexibility to the financial program.

3. Most post-war issues of preferred stock carrying a high dividend rate (frequently 8 per cent) no doubt contain the callable feature because the company naturally expected money rates to drop after a few years, at which time it would be possible to raise capital on a more favorable basis. Incidentally, there are a number of examples of concerns which, because of the probable trend of interest rates, have recently issued preferred stock entitling the holder to a high rate of dividend for a certain number of years, after which the rate shall drop one or perhaps two per cent.

4. Many industrial concerns have, in the early days of their history, used preferred stock as a means of raising capital without losing the control of the original management, on the one hand, and without incurring *fixed* obligations, on the other. However, when the business becomes more "seasoned" and the management is well established, there may be no sufficient reason for keeping out a large issue of preferred stock, which may accordingly be retired as the earnings permit.

5. No doubt a potent reason for including the callable feature in the more recent issues is accounted for by the very drastic restrictive provisions with which it has been necessary to surround preferred stock issues in order to give them a market. Many a concern could perhaps breathe "easier" with these restrictions out of the way. It might also be possible to raise the same amount of capital by future bond issues carrying a decidedly lower rate of interest, provided it were not thought desirable to issue additional common stock.

6. Finally, a number of well-managed concerns which found it necessary to raise new capital by means of preferred stock issues during the last few years have wisely provided for the possibility of early retirement of the stock. This policy was based on the assumption that when and if prices should drop the company would not need so much working capital in the business, and, hence, with a large proportion of preferred stock

outstanding, the concern might, for all practical purposes, be needlessly overcapitalized. The history of the recent period of deflation has amply demonstrated the wisdom of this policy.

Another feature of interest is the *convertible* provision attaching to many preferred stock issues. In accordance with this provision it is possible for the holder of preferred stock to exchange his securities for common stock at a designated rate. Thus, a certain speculative attraction may, under certain circumstances, attach to the preferred stock.

PROTECTIVE PROVISIONS

Of great significance have been the special *protective* provisions which have in recent years surrounded preferred stock issues. In addition to the above mentioned voting power and sinking fund requirements, certain covenants and penalties are now commonly attached to issues of preferred stock. These may in general be summed up under the three following heads:

1. Provisions for the maintenance of the company's property in first-class condition, including proper depreciation allowances, insurance against losses by fire and sometimes insurance on the lives of the chief officers. Here may be included restrictions preventing the sale of fixed assets or a change in the character of the business.

2. Protection against the issue of new preferred stock or obligations taking precedence over the preferred. It is commonly provided that no additional preferred stock shall be issued without the favorable vote of three-fourths of the preferred stock already issued and outstanding. Sometimes a like vote of the common stock is also required for this purpose. Combined with the requirement of this vote, it is usually necessary for the net quick assets of the corporation to indicate a very favorable position and for the net earnings available for dividend payments to have shown a wide margin of safety. The issue of funded obligations of any sort is usually hedged around with even more drastic restrictions.[1]

[1] Referring again to Mr. Keister's study, it appears that in 111 issues of preferred stock out of 157 examined, the company agreed not to place any

(Footnote continued on next page.)

3. The investment is further safeguarded, in theory at any rate, by the imposition of an obligation upon the company to maintain *net quick assets* at from 100 per cent to 150 per cent of the outstanding preferred stock, and *net tangible assets* frequently at a ratio twice as great. It is also usual to require the maintenance of the current ratio (the ratio of current assets to current liabilities) at a certain specific figure which is deemed safe. It is customarily stipulated, also, that dividends shall not be declared upon any class of stock other than first preferred which shall result in a reduction of the net quick assets of the corporation below a specified minimum percentage of the aggregate par value of the outstanding preferred stock or below a definitely stipulated ratio to current liabilities. Finally, the company may be forbidden to pay any dividends on the common stock except out of future earnings. Thus the equity back of the preferred cannot be decreased by distributing the surplus.

Since it might be possible by means of some juggling of figures to seem to abide by the foregoing provisions, while in practise they are departed from, many preferred stock "indentures" define specifically what shall be understood by the various terms used, so as to avoid any possible misunderstanding. Technically, any failure of the corporation to abide by these various protective provisions would constitute a "default" which might stop the payment of dividends to common stockholders or give sole voting rights to the preferred.

A recent preferred stock issue, the indenture of which embodies practically all of the essential features above indicated, is that of the Geo. E. Keith Company, put out by Lee, Higginson & Co. From the letter of the president of the company, the following description of the first preferred stock is quoted:

DESCRIPTION OF THE FIRST PREFERRED STOCK OF THE GEO. E. KEITH COMPANY

The First Preferred Stock has a par value of $100 per share. Among the preferences and limitations which apply to it are the following:

future mortgages on the fixed assets of the company, with the exception of purchase money mortgages, without the consent of a large proportion of the outstanding preferred stock. The usual proportion was 75 per cent.

Preferred, As To 7 Per Cent Cumulative Dividends, payable quarterly, first payment, January 1, 1920.

Preferred As To Assets. In the event of dissolution the First Preferred Stock will be entitled to $110 per share and accumulative dividends, before any distribution may be made on any other class of stock.

Callable. As a whole, or in part for the sinking fund, on any dividend date at $110 per share and accrued dividends, on 30 days' notice.

Sinking Fund. 15 per cent of the annual net profits remaining after the payment of taxes and 7 per cent dividends on the First Preferred Stock. Payments to be made annually, the first payment to cover profits for the fiscal year ending in 1920, as determined by the annual audit. The sinking fund will be applied to the *purchase* and retirement of First Preferred Stock at not exceeding $110 per share plus accrued dividends, or to the *call* of the First Preferred Stock, if not so purchasable. or invested, for the purposes of the Sinking Fund, in securities legal for Massachusetts savings banks.

Priority. No mortgage or funded debt or stock having priority over or equality with the First Preferred Stock may be created by the Company without the consent of the holders of 75 per cent of the First Preferred Stock, except that the Company may acquire additional property subject to existing or purchase-money mortgages or liens and renew the same.

Future Issue Restricted. The amount of authorized issue may not be increased without the consent of holders of 75 per cent of the First Preferred Stock. The remaining $4,000,000 authorized, but not now to be issued, may be issued only (*1*) when the Company's consolidated net assets, depreciation deducted and not including patents, trade-marks or good-will, but including the proceeds of the First Preferred Stock proposed to be issued are at least twice the par value of the First Preferred Stock, including that proposed to be issued, and (*2*) when the Company's average annual net earnings for the last three fiscal years preceding such issue shall have equaled at least twice the annual dividend requirements of the outstanding First Preferred Stock and that proposed to be issued.

Other Protective Provisions. No cash dividends may be paid on the Company's Common Stock:

1. Except out of profits earned after June 30, 1919.
2. Until the current quarterly dividend and all accumulated dividends on the First Preferred Stock shall have been paid or set apart.
3. While any sinking fund payment for the First Preferred Stock is in arrears.
4. Which would reduce the *net quick assets* of the Company below 110 per cent of the First Preferred Stock then outstanding.

ANNUAL AUDIT. An annual audit is to be made by a public accountant selected by the Company and approved by Lee, Higginson & Co.

VOTING POWER. Except for limited purposes, the First Preferred Stock shall have no voting power. If four quarterly dividends on that stock are in arrears, it will have equal voting power per share with other stock until all past due dividends shall have been paid.

THE FOREGOING PROVISIONS RELATING TO PREFERENCE AS TO ASSETS, DIVIDENDS AND CALLING PRICE CAN BE ALTERED ONLY WITH THE UNANIMOUS CONSENT OF THE FIRST PREFERRED STOCK, AND THE OTHER PROVISIONS ONLY WITH THE CONSENT OF 75 PER CENT OF THE FIRST PREFERRED STOCK.

In actual practise, however, there may be more "bark" than "bite" in some of these stipulations, the purpose of which is to make this particular type of security more attractive to investors while avoiding the fixed charges which would be incurred by the issue of notes or bonds. Preferred stock issues, carrying the numerous covenants and penalties above suggested are really very much more akin to the funded obligations of the corporation than to its common stock. By the utilization of this device, the company can avoid the dangers of the receivership which might result in case interest payments could not be met. In the last analysis, however, the investor should realize that the preferred stock affords a lien on management rather than on tangible assets. Protective provisions do not by any means always strengthen a weak concern, and they may seriously hamper or weaken a strong company.

MISCELLANEOUS FEATURES OF STOCK ISSUES

Since a number of additional terms are sometimes met with in connection with various types of stock issue, a brief reference should perhaps be made to the more common. From the foregoing discussion the reader should not be misled into thinking that the number of different types of stock issues has been exhausted. On the contrary, it is becoming the practise to multiply almost indefinitely the various classes of stock issues and the provisions which surround them. For example, many companies put out a *second* preferred as well as a first preferred stock. Sometimes the first preferred is referred to as *prior preference* stock as in the case of the Goodyear Tire & Rubber issue, put out after the readjustment of capitalization in order to pay the mercantile creditors. Common stock, also, is sometimes divided into several different classes, frequently designated as "A" and "B." Preferred stock issues, as well, are occasionally designated by these letters. Examples of a wide diversity of issues are afforded by the General Motors Corporation, the Bethlehem Steel Corporation, Armour & Company, the Goodyear Tire & Rubber Company, and Pierce-Arrow Motor Car Company.[1]

Treasury stock is stock which has been originally issued by the corporation and has later come back into the company's possession through donation, purchase, payment of obligations, or otherwise. Such securities are usually of very questionable asset value.

Management stock is sometimes issued in connection with a reorganization. It is normally very small in amount as compared with the other classes of stock outstanding, and as the

[1] The amount of a company's capital stock is provided for in the charter. The approval of this charter by the properly constituted state authorities, *authorizes* the issue of the designated amount of stock. Sometimes only a portion of the "authorized" stock is actually issued, the directors of the company reserving the right to put out the remainder in a manner and at a time which may be convenient. Frequently, also, only a portion of the issued stock is *outstanding*, the remainder having been by some legal fiction given back to the company, whereupon it is designated as "treasury" stock. Such stock, now legally issued, can be disposed of by the directors of the company as they may see fit without any specific restrictions imposed by law.

name indicates carries with it the sole voting power. An excellent example of a recent issue of "management" stock is found in connection with the reorganization of the Goodyear Tire & Rubber Company. Only $10,000 par value management stock was outstanding, as contrasted with total stock issues aggregating nearly $100,000,000.

A guaranteed stock is one of which the dividends are "guaranteed," ordinarily by a corporation leasing the property of the issuing company for a long period of years at a fixed minimum annual rental which will amply protect the dividend. Such "guaranteed" stocks are most commonly found among railway issues, and they may, under certain circumstances, be very desirable investments because of the permanency of the dividend guarantee.

Founders' shares, as well as *debenture* stock, are more frequently met with in English than American corporations. Founders' shares have recently been issued by the Armour Leather Company, incorporated under the laws of Delaware. Such issues are relatively small in amount as compared with the remaining capitalization, and frequently carry the provision that after preferred stock dividends are paid, any remaining balance available for dividend payments shall be divided *equally* between the common stock and the founders' stock. Thus such stock may have a very high potential and speculative value. *Debenture* stock in English and Canadian practise usually ranks ahead of other classes of stock in the matter of dividend payments. This term, however, has been used in quite another sense in connection with certain issues in this country, which may rank junior to the preferred but ahead of the common.

As a matter of information it should be mentioned that the names of the owners of stock are recorded on the books of the corporation together with the number of shares standing in each name. In any corporation of size, however, it is customary to employ certain banks or trust companies as *transfer agents* and *registrars.* This is essential if the stock is listed on an exchange. The "transfer agent" supervises and certifies

transfers of stock from one owner to another. Old certificates are canceled and new ones issued through the transfer agent, who usually has in his custody the stock certificate book of the corporation. The "registrar" who is frequently distinct from the transfer agent, though not necessarily so, merely examines and keeps a record of the stock certificates, as issued and canceled, together with the names of the parties involved in the transfer. His signature must appear on the certificates as evidence of due issue.

When dividends are declared due public notice thereof is given, and if the stock is widely held it is common to announce that the "transfer books" will be *closed* a certain number of days before the dividend is due, in order that there will be no confusion regarding the parties to whom dividends shall be paid. Some companies, however, do not close their books, but merely announce that dividends will be paid to stockholders of record at a certain date.

VOTING PROVISIONS

There are many interesting aspects of the voting power ordinarily vested in the common stockholder. As a matter of fact, in the average large concern very few stockholders ever exercise their voting power. The smaller stockholders are widely scattered and though they may in the aggregate control the majority stock, the concentrated minority of votes may easily direct the affairs of the corporation. A device which makes it easy for the directors, who are usually chief officers as well, to manage the affairs of the company as they see fit, is the use of the so-called *proxy*. By the use of this device a stockholder not present at the annual meeting of the corporation—and extremely few stockholders ever find it convenient to attend these meetings—can authorize the officers or their representatives to vote for them as their lawful attorneys and the stockholders of the American Telephone and Telegraph Company, together with the "proxy" form used, may be of interest.

Notice of Annual Meeting

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

NEW YORK, N. Y., MARCH 4, 1929.

TO THE STOCKHOLDERS:

Notice is hereby given that the Annual Meeting of the Stockholders of the American Telephone and Telegraph Company will be held at the principal office of the Company, No. 195 Broadway, Borough of Manhattan, City of New York, N. Y., on Tuesday, the twenty-sixth day of March, 1929, at 12 o'clock noon, for the following purposes:

1. To elect Directors and Inspectors of Election for the ensuing year.
2. To consider and act upon the question of increasing the capital stock of the Company from one billion five hundred million dollars ($1,500,000,000), consisting of fifteen million (15,000,000) shares of the par value of one hundred dollars ($100) each, to two billion dollars ($2,000,000,000), to consist of twenty million (20,000,000) shares of the par value of one hundred dollars ($100) each.
3. To transact such other business as may properly come before the Stockholders.

Stockholders of record on the stock-transfer books of the Company at the close of business on March 14, 1929, will be entitled to vote at the meeting of which notice is hereby given.

ARTHUR A. MARSTERS, *Secretary.*

It is important that your stock be represented at the meeting of which you are notified above, in order that the presence of a quorum may be ensured.

Attached below will be found a form of proxy which, if you cannot be present in person, you are requested to sign and forward to Arthur A. Marsters, Secretary, 195 Broadway, New York, N. Y. A blank space is left in the proxy for other attorneys if desired instead of those named.

ARTHUR A. MARSTERS, *Secretary.*

FORM 4. Notice of Stockholders' Annual Meeting

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

No....................

KNOW ALL MEN BY THESE PRESENTS, that the undersigned, stockholder in the American Telephone and Telegraph Company, does hereby constitute and appoint Charles Francis Adams, James S. Alexander, Walter S. Gifford, Henry S. Howe and

Daniel Willard...

attorneys, with power of substitution to each, for and in the name of the undersigned, and with all the powers the undersigned would possess if personally present, to vote upon all stock of the undersigned in the American Telephone and Telegraph Company at the annual meeting of the stockholders of said Company to be held on Tuesday, the twenty-sixth day of March, 1929, and at any adjournment of said meeting. A majority of such of said attorneys as shall be present and shall act at said meeting (or if only one shall be present and act, then that one) shall have and may exercise all of the powers of all of said attorneys hereunder.

March........................1929.

....

(Signature should agree with name on stock certificate)

Executors, administrators, trustees, etc., should so indicate when signing.

FORM 5. Proxy Used at Stockholders' Meeting

When each share of the corporation has one vote, it is possible that the minority stockholders may fail to secure any representation whatever in the management of the company, even though their investment interest might be almost as great as that of the majority. In order to guard against the injustice which might result for such a state of affairs, various at-

tempts have been made by law to "protect" the minority stockholder. One of these methods, by no means common in the United States, is to fix a distinct maximum limit to the number of votes which can be cast, irrespective of the number of shares held.

A more common procedure in this country is to provide for a *cumulative* vote so that by a concentration of their votes on one or more directors the minority may be sure of securing adequate representation. For example, if six directors were to be elected, each share of stock would normally be entitled to six votes, or one for each director. Let us assume that there are 1,000 shares of stock outstanding and that 600 shares can be voted by the majority. If it were necessary for every share to cast a vote for each director it is perfectly obvious that the minority interest would always be "frozen out" by the majority "slate." Even 501 votes would be sufficient to elect the candidate. When cumulative voting is allowed, however, it is possible for the minority shares to concentrate all of their votes, or a sufficient number to insure election, upon one or more candidates. In the present instance, therefore, there would be a total of 6,000 votes to cast, and 400 shares, entitled to 2,400 votes, could concentrate on two candidates. This would give 1,200 votes to each candidate whereas just over 1,000 votes would be sufficient to elect. In this manner, a minority which might otherwise have been shut out, would be able to secure a one-third representation on the directorate.

CHAPTER VI

THE INSTRUMENTS OF LONG TIME FINANCE—BONDS AND NOTES

Classification of bonds—A. The nature of security offered—Mortgages—Collateral security—Explanation of terms—Protective provisions—B. Purpose of the issue—C. Methods of repayment of principal—Sinking fund provisions—Debenture bonds, and their distinguishing features—Miscellaneous considerations.

THE funded indebtedness of a corporation normally includes all of its obligations to creditors which have a duration of more than one year. While the term *bond* has frequently been rather broadly used to include not only definitely secured obligations of the company but also all instruments of indebtedness the principal of which does not become due for 10 years or more, this usage of the word seems to be wholly illogical. For purposes of discussion, therefore, a bond may be defined as a secured promissory note of the issuing corporation irrespective of the time of maturity, while *notes* will include all unsecured promises to pay.

A bond may be secured either by a *mortgage* on specific property, in which case it becomes a "mortgage" bond, or by the deposit of other securities as *collateral* in the hands of a lawfully appointed *trustee,* in which case it is designated as a "collateral trust" bond. A note, or *debenture* bond, on the other hand, must depend for its security only upon the general credit of the issuing company, though it is ordinarily backed up by many *protective* and *restrictive* covenants and provisions.

An almost infinite number of permutations and combinations can be made between the two general types of bonds, and they can be classified in a large variety of ways: (*1*) According to the nature of the underlying security; (*2*) according to the purpose of issue; (*3*) according to the manner of repayment of

principal; (*4*) according to the character of the issuing corporation; and in a number of other ways. For practical purposes, the most significant classifications in this brief treatment are those which can be made:

A. On the basis of the underlying security;

B. In accordance with the purpose of the issue;

C. According to the method of repayment of principal.

Naturally, a great deal of overlapping is to be found which leads to an extremely wide variety of issues.

A. On the basis of security of principal, bonds are designated as *first* mortgage, *second* mortgage, *third* mortgage, and the like, depending upon how many issues have been secured by the same piece of property. Issues following the first mortgage are *junior* to it and the issues which are better secured than those under discussion are referred to as *senior* issues. While such mortgage issues may be multiplied almost indefinitely by railroad companies, it is not common in industrial issues to find more than one mortgage placed on the same property. A *prior lien* bond takes precedence over a bond already secured by a mortgage on the same property, with the consent of the earlier bondholders. This term, however, does not necessarily indicate that the bond is in a strong position, since it might merely be given precedence over a junior security.

A *purchase money* mortgage bond is "senior" to all other liens upon the property. As the name indicates, such securities are sometimes issued when additional property is acquired by a corporation, particularly when new property has been built by a "construction company" which receives payment in this manner.

A *general* mortgage bond indicates that the fixed assets of the company are "generally" pledged as security, subject, however, to other senior mortgages. Such issues are rarely found except in the case of railroad and public utility companies. Frequently, the term "general" is used in order to avoid specifying the exact position of the bond with relation to senior securities. A *blanket* mortgage, on the other hand, is one which covers both present property and any acquired in the future.

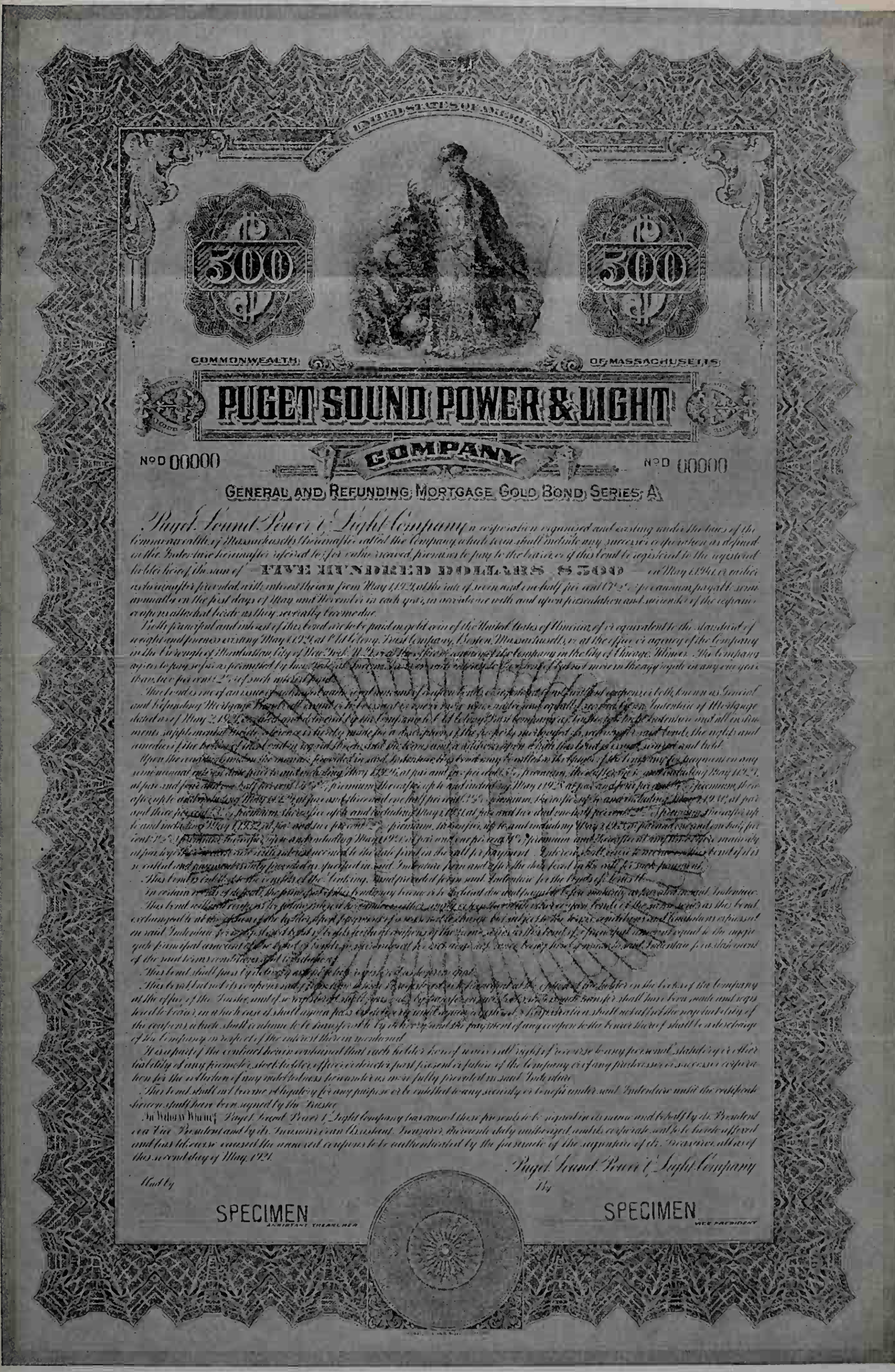
As already indicated, a *collateral trust* bond is one secured by the pledge of other securities which are deposited with a trustee. These securities are most commonly stocks or bonds of subsidiary companies, though it is not infrequent to find outside securities pledged, and sometimes even other securities of the issuing company. For example, "first" or "general" mortgage bonds may be authorized and issued by a company, all of which may be deposited as collateral to secure a "collateral trust" bond. This device is of rather dubious value, since, under such circumstances, there is absolutely no difference in security between the bonds deposited and the bonds in the hands of the investor. From the company's point of view, however, it may be significant that the holder of a collateral trust bond cannot exercise the right of *foreclosure* in case interest payments are defaulted. He can merely take possession of the pledged securities. This, of course, may afford a certain amount of protection to the company itself.

The above type of bond has been very generally used by public utility holding companies as well as by some industrial corporations, and has proved a useful method of financing from the legal point of view. Yet, it must be remembered that in the last analysis the security of the collateral trust bond is wholly dependent upon the earning capacity of the property whose securities are pledged. In order to protect the holder of such bonds the indenture should provide against the issue of additional obligations senior to those deposited by the company whose securities are used as collateral.

A common type of issue put out by railway companies is the "equipment trust" bond or "note." These obligations are issued in connection with the purchase of rolling stock on which a direct mortgage is placed. The usual practise is to interpose a *trustee* between the buyer and the equipment company from which the purchase is made, who shall hold title to the property. The trustee then leases the equipment to the operating company which issues the bonds. Such bonds carry a *sinking fund* provision which will be sufficient to retire all obligations during the life of the equipment. Similar securities are some-

Form 6, Insert IV

GENERAL AND REFUNDING MORTGAGE BOND



Face of Coupons

Reverse Side of Coupons

times put out by industrial corporations, particularly by the large oil and refining companies.

Recently a new type of security issue has been developed which may be called the *commodity security note.* This was used by a few concerns whose inventory failed to move because of post-war conditions. These notes constituted a direct lien on merchandise in the raw state and matured in from one to five years. Perhaps the best-known issue of this sort was that of the Copper Export Association which put out $40,000,000 of such securities early in 1921. The notes were also "guaranteed" by the copper producing companies which were members of the Association. As this particular method of financing is really more concerned with short time credit than with the securing of fixed capital, more specific attention will be directed to the matter in a later chapter.[1]

Mention should also be made of another type of bond which, while not secured by mortgage or by pledge of collateral, is *guaranteed* by a company other than the issuing corporation. An unconditional guaranty renders the guarantor liable to payment of principal and interest of the bonds in case the issuing company should default. It sometimes happens that the securities of less-known subsidiary companies are given a better market as a result of such guaranties by the parent concern. There is danger, however, that a company may seriously injure its credit by being too liberal in the use of its name for such purposes. The following is an interesting example of the guaranty stamped on the first mortgage bonds issued by a small railroad company:

> "The A Railway Company for value received unconditionally guarantees to the holder of the within bond the payment of the principal of the within bond and of the indebtedness represented thereby, and of the interest of said bond and indebtedness, as such principal and instalments of interest shall respectively become due; and in case of the failure of the B Railroad Company punctually to make any such payment of either principal or interest as the same shall mature, the A Railway Company agrees itself punctually to make such payment."

[1] See Chapter XVIII.

EXPLANATION OF TERMS

At this point perhaps there should be a brief explanation of certain features of the mortgage which are of general interest in connection with bond issues. A *mortgage* may be defined for present purposes as a "conveyance of property for the purpose of securing a debt." As a rule, mortgages issued by industrial corporations cover only the "fixed" assets, that is, plant, equipment, real estate, and the like. Since the average concern borrows frequently from the bank and the bank must look for security of its loan to the strength of a company's current assets (cash, receivables and inventory), it is obvious that from the commercial banker's point of view it would not be desirable for any prior claims to be placed on "current assets" of a business. Mortgages are frequently issued with a so-called *after acquired* clause. This means that all property acquired after the issue of the mortgage shall be subject to the same lien. By this device, an issue may apparently be greatly strengthened from the investor's point of view, though from the company's point of view it is no doubt unwise to agree to such restrictions unless an exception is made for "purchase money" mortgages.

It is also common to refer to mortgages as *closed* or *open end*. In accordance with the terms of a "closed" mortgage, no further bonds can be put out after the original issue. An unlimited "open end" mortgage, however, allows the company to issue additional bonds of an indefinite amount, secured in the same manner, at the discretion of the officials of the company. Frequently, however, the open end provision is *limited* by a stipulated maximum.

When a mortgage bond issue is "closed," it is not customary to impose any particular restrictions upon the company for the benefit of security holders. When it is left open, however, it is obviously in the interests of the creditors to have certain definite protective features imposed upon the company. The nature of these provisions will depend somewhat upon the type of business being carried on, but the following will indicate the general character of such restrictions.

1. Additional bonds may be issued only to a certain percentage of the cash cost of additions or improvements to the mortgaged property. This percentage varies from 50 per cent to 80 per cent, though 60 per cent to 75 per cent is probably most common.

2. The company is required to maintain the net tangible assets at a certain minimum percentage of the total funded debt, or of the particular issue at the time outstanding. This percentage varies depending upon circumstances, but is frequently 200 per cent or 250 per cent.

3. Another common restriction has to do with the maintenance of the "current ratio." This must not be allowed to fall below a certain point, ranging from 125 per cent to 200 per cent.

4. Sometimes it is also stipulated that additional bonds cannot be issued unless the net earnings applicable to the payment of interest during the preceding year shall have been at least two or two and one-half times the interest on all bonds of the particular issue outstanding, together with the additional bonds which it is proposed to issue.

Aside from a statement of the general nature of the bond and the time and place of interest payments, not much information is ordinarily given in the bond certificate itself. The various rights of the creditors together with the obligations imposed on the issuing company, as well as a full description of the property which secures the issues are fully set forth in the *indenture,* which is frequently a very large document, and is deposited with the *trustee,* usually some trust company, whose duty it is to see that the company fulfils its obligations as set forth in the "indenture" or "deed of trust." The "trustee," however, having been chosen by the borrowing company, may not be over zealous in guarding the interests of bondholders in case of default.

Mortgaged property can be, under certain conditions, sold by the "trustee" for the benefit of the bondholders under *foreclosure* proceedings, in case the company defaults in the pay-

ment of principal or interest of the bonds. Usually, however, a certain *period of grace* is allowed.

When bonds are secured by collateral they become "due" and "payable" after a certain interval has elapsed following the default on the part of the issuing company. The collateral may then be sold to satisfy the claims of the bondholders. If a company should default in the carrying out of its obligations in connection with a *debenture* bond, the holders of the notes can presumably throw the concern into a *receivership,* to be operated for the benefit of creditors until such time as the defaults shall be made good. The whole question, however, is a rather complex one, and the conclusion must not be drawn that these various rights of the security holder are always enforced or carried to the bitter end. In the majority of cases, friendly adjustments are made which obviate the necessity of any court action.

B. As to the purpose of their issue, some of the most obvious classifications of funded debt are as follows:

1. *Consolidated* or *unifying* bonds are those which have been issued in order to simplify all outstanding obligations by exchanging one issue carrying a uniform rate of interest for a number of similar issues put out at various rates of interest.

2. A *funding* bond is sometimes issued to "fund" a floating debt; while the purpose of a *refunding* bond is to raise money to pay off a maturing issue, or it may be directly exchanged for the earlier issue.

3. *Adjustment* bonds, as the name indicates, are sometimes issued in the course of a *reorganization* in order to "adjust" the claims of creditors against a company which has become insolvent. This type of bond, together with the *income* bond, usually has its interest paid only when the earnings will permit. The interest payments on such bonds may be either cumulative or non-cumulative.

4. *Receivers certificates* are sometimes issued by the receiver of an insolvent company in order to secure more or less temporary funds. From the credit point of view these certificates

take precedence over those bonds, as a result of the default in the payment or terms of which the receiver was appointed.

Other groupings might be made under this head, and there is frequently no clear cut distinction between the purpose of issue and the underlying security.

C. With regard to the "method of payment" and allied features, perhaps some of the following suggestions will be most helpful:

1. Bonds are frequently *convertible* into stock of the company at the option of the holder. This "conversion" provision sometimes combines a safe speculation with a conservative investment, particularly when the earning power of the common stock is well assured. Such a provision also gives the issuing company an opportunity to reduce its funded obligations in a very advantageous manner.[1]

2. Bonds may be *redeemable* or *callable* at a designated rate. The majority of issues put out at a time when interest rates are abnormally high carry this redemption feature. Thus, the company can have an opportunity, as interest rates drop, to retire one issue and replace it by a new issue, carrying a lower interest rate. Bonds may be redeemable either in whole or in part, and the callable feature may be optional or obligatory on the company. It is usual, also, to stipulate that the premium paid to the holder in case of redemption shall be graduated downward in succeeding years or periods of years.

[1] In order to illustrate the possible value of the "conversion privilege," let us assume that a bond issued at 95 is convertible into common stock at 80. This would mean that for every $100 par value of bonds, an exchange could be made for 1¼ shares of common stock. Obviously, therefore, it might be advantageous to convert bonds into stock when the market price of the stock has reached a point at which the price of 1¼ shares would be equal to or greater than the original issue price of the bonds. Let us assume that at the time these hypothetical bonds are issued, the stock is selling at 70. In order for the exchange to be profitable, therefore, it would be necessary for the bondholder to wait until the stock should be selling at such a point that 1¼ shares would have an aggregate market value of $95. This point can be calculated in two ways, either by dividing 95 by 1.25 or by multiplying the conversion ratio, 80, by the issue price of the bonds, 95. In either case the result will be 76. Evidently, therefore, when the common stock rises above 76 it may be advantageous, depending, of course, upon the present market price of the bonds, to make the exchange.

The "call" prices vary greatly, depending upon the credit of the issuing company or upon the bankers' forecast of the probable trend of interest rates. Frequently, also, it is stipulated that the bonds shall not be callable until a considerable period of years has elapsed. From the investor's point of view, this callable feature causes a good deal of annoying uncertainty. Because of the very sudden drop in interest rates, a number of 8 per cent bonds put out in 1921 were within a year or two being called and replaced by other securities carrying an interest rate of from 1 per cent to 2 per cent lower.[1]

3. Most of the recent bond issues, whether secured or debenture, carry a *sinking fund* provision which will normally increase the security back of the obligation and will make possible the redemption of certain annual amounts, as provided for in the indenture. It is an almost universal practise for companies whose fixed property consists of *wasting* assets, such as timberlands, mines, oil wells, and the like, to make a liberal sinking fund provision sufficient to retire the entire issue by

[1] Some interesting examples of these various callable features are the following:

(*a*) The $10,000,000 First (Closed) Mortgage 20-Year 8 per cent Sinking Fund Gold Bonds of the Fisk Rubber Company, dated September 1, 1921, are not "callable" until September 1, 1931, on which date and subsequent interest dates, they are callable only *as a whole* at 117½ and interest up to and including September 1, 1936, and thereafter at 112½ and interest. It is *optional* with the company whether the bonds shall be called. The mortgage also provides for a sinking fund accruing from the date of the bonds, and available semi-annually to purchase $500,000 of bonds each year if obtainable at or below 110 and interest. All bonds acquired by the sinking fund are to be canceled.

(*b*) The indenture of the $4,000,000 8 per cent 10-Year (Closed) First Mortgage Gold Bonds of the Charcoal Iron Company of America, dated November 1, 1921, provides for a sinking fund along the following lines. Provision is made that $100,000 par value of these bonds *must* be called for sinking fund purposes upon each interest payment date, upon 30 days' published notice, on a 6 per cent interest basis for the unexpired life of the bonds, which is equivalent to over 114, a premium of 14 per cent for the year 1922, graduating to 101 for the year 1931. All bonds to be so redeemed shall be drawn by lot by the trustee.

(*c*) In the $30,000,000 issue of 8 per cent 10-Year Debenture Notes put out by the Goodyear Tire and Rubber Company, dated May 1, 1921, it was provided that the notes may be callable *as a whole* or *in part* after May 1, 1922 at 110 and interest, on 30 days' notice. A sinking fund was provided for this purpose and the indenture stipulated that all notes not retired before maturity *must* be paid at maturity at 110 and interest.

maturity. In the case of other types of enterprise it frequently happens that the sinking fund will provide for the retirement of only a portion, perhaps 50 per cent, of the issue before the entire issue becomes due.

Payments to the sinking fund may in general be made by two different methods, either (*a*) by setting aside a certain percentage of the company's earnings each year or (*b*) by paying into the fund an arbitrary amount—usually a certain percentage of the outstanding obligation which is to be retired through the sinking fund. The sinking fund may be used in a variety of ways. (*1*) The funds paid in may immediately be used to retire securities either by "redemption" or by purchase in the open market, or (*2*) the fund may be invested in securities of other corporations, or (*3*) may be deposited with a trustee to draw interest. The former method of handling sinking funds is probably more common in recent issues.

From the investor's point of view there are no doubt a number of advantages to be gained from having the sinking funds of a company used to purchase the securities of the particular issue for the retirement of which the sinking fund was created. Some of these advantages are the following:

a. The security holder gains in the certainty and protection of his loan.

b. A "market" is thus maintained for the outstanding securities so that there will be little fluctuation or drop in the price which may be realized by an investor who wishes to dispose of his holdings.

c. If the purchased securities are not canceled, the sinking fund will earn at the same rate as the interest on the bonds—this is frequently a higher rate than could be realized through other safe investments.

4. A *serial* bond or note issue is an issue of which certain definite amounts mature each year over a series of years, so that the aggregate of obligations outstanding will be progressively decreased. Such issues are perhaps more common in the case of "debentures" and of companies with "wasting assets."

Usually a sinking fund provision is coupled with the serial feature.

There is an almost unlimited possibility to combine in some manner or other different features of bonds above described. For example, such terms as the following are commonly met with: first and refunding, first mortgage sinking fund convertible, guaranteed sinking fund, sinking fund convertible debenture, and the like.

Participating bonds are also sometimes issued, which give the holder a right to share in the net profits of the business in accordance with some pre-arranged plan. Infrequently, a bond will carry with it the right to a stock subscription at a favorable figure. The term *profit-sharing* is also occasionally used instead of participating.[1]

DEBENTURE BONDS

Special reference should perhaps be made to the recent and rather numerous issues of *debenture* bonds, or notes, of different types, which are simply unsecured promises to pay, based on the general credit of the borrower. Such issues are common in industrial companies, though rare in public utilities or railroads outside of New England. In England, however, *all* bonds are commonly referred to as "debentures," as mortgage bonds are exceedingly rare.

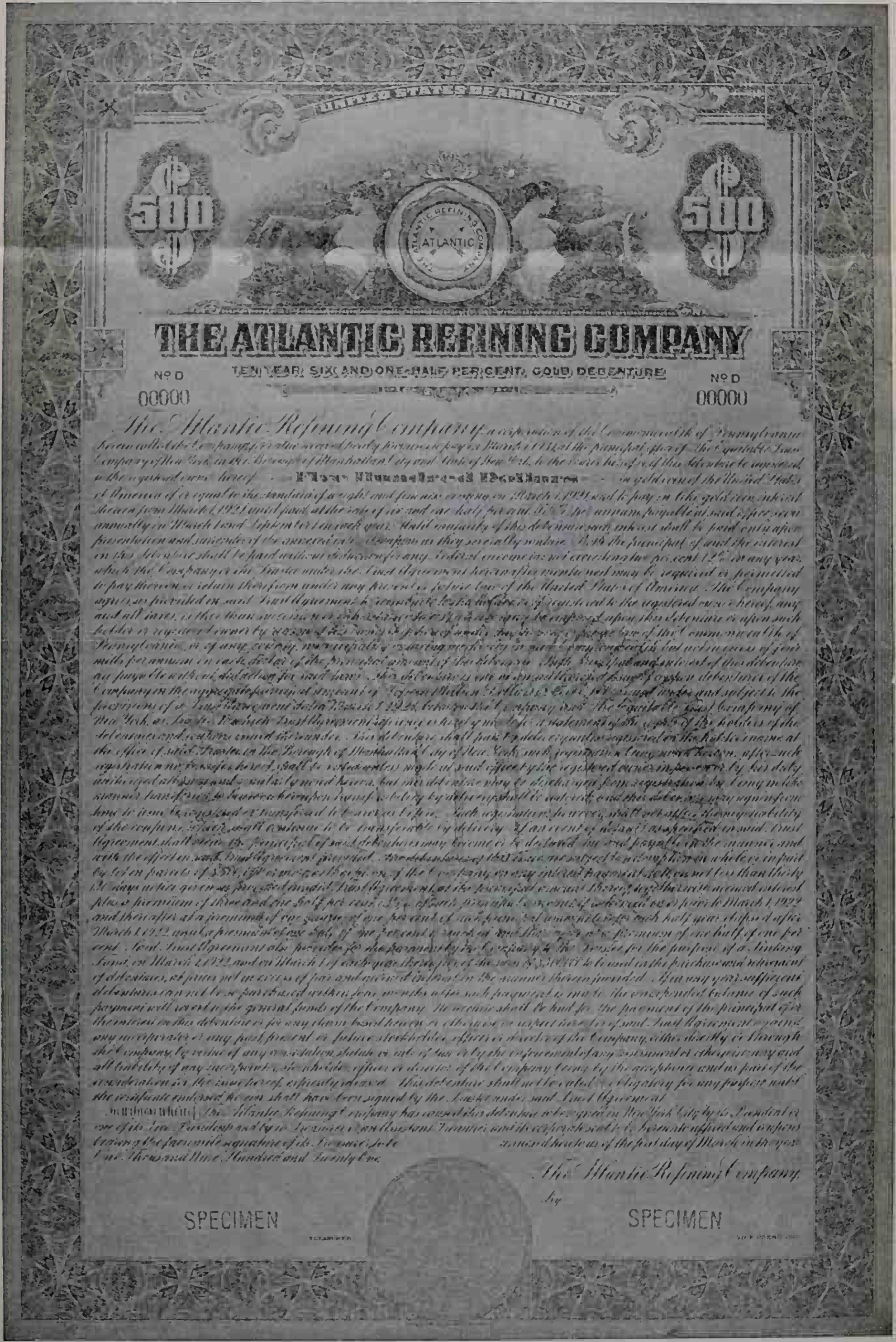
These securities have sometimes been issued at a very high rate of interest, up to 8 per cent, in order to increase the working capital of concerns whose current assets had become

[1] An example of the former type is furnished by a recent issue of the 8 per cent Participating Secured Gold Notes of the Island Oil and Transport Corporation, which provided that the corporation should deposit monthly with the trustees an additional *1 cent* per barrel for all crude oil delivered in or shipped from Mexico to its customers by the corporation or its subsidiaries, which amounts were to be distributed among the noteholders on the trustees' books in *pro rata* payments to be made on December 15 of each year, in addition to the stated semi-annual interest payments.

The second feature is illustrated in a recent issue of the Marland Oil Company, in accordance with which the bondholders were, until April 1, 1931, privileged subscribers to 25 shares of common stock of the company at $40 per share, the current price of these shares at the time of writing being about $45. Hence it is apparent that the privilege was at the time mentioned worth about $125 per $1,000 bond.

Form 7, Insert V

DEBENTURE BOND



UNITED STATES OF AMERICA

$500

THE ATLANTIC REFINING COMPANY

TEN YEAR, SIX AND ONE-HALF PER CENT, GOLD DEBENTURE

No D 00000

No D 00000

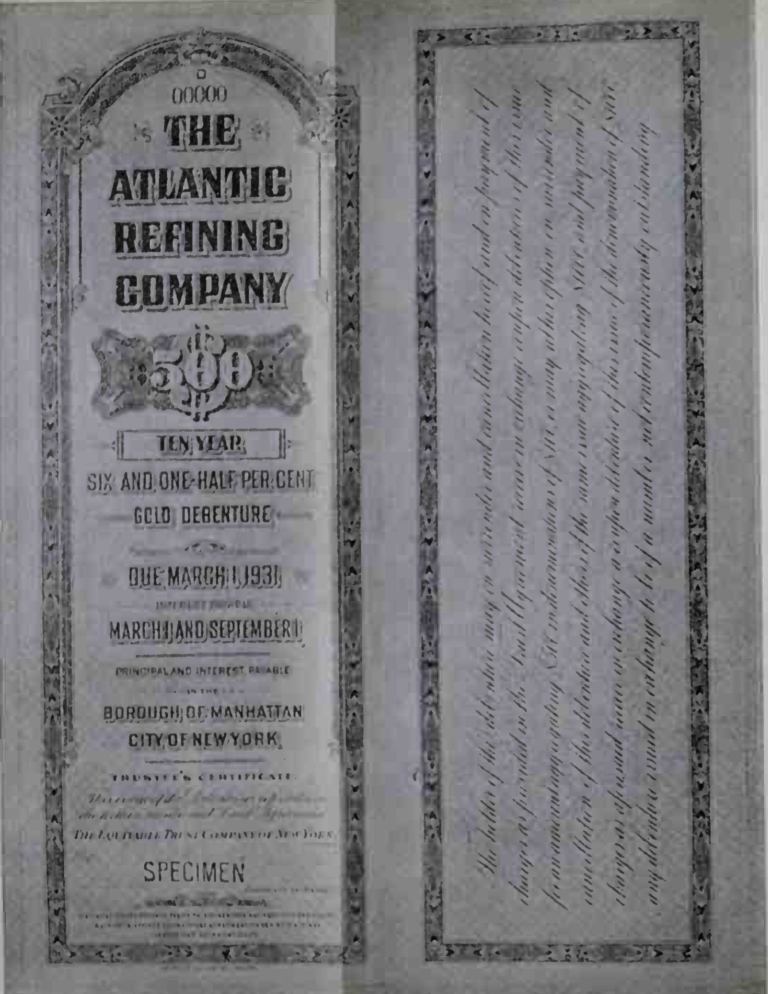
The Atlantic Refining Company

The Atlantic Refining Company

By

SPECIMEN

SPECIMEN


00000
THE
ATLANTIC
REFINING
COMPANY
500
TEN YEAR
SIX AND ONE-HALF PER CENT
GOLD DEBENTURE
DUE MARCH 1, 1931
MARCH 1 AND SEPTEMBER 1
PRINCIPAL AND INTEREST PAYABLE
BOROUGH OF MANHATTAN
CITY OF NEW YORK
TRUSTEE'S CERTIFICATE
THE EQUITABLE TRUST COMPANY OF NEW YORK
SPECIMEN
The holder of this debenture may on surrender and cancellation hereof and on payment of
charges as provided in the Trust Agreement receive in exchange coupon debentures of this issue
for an amount aggregating $500 in denominations of $100, or may at his option on surrender and
cancellation of this debenture and others of the same issue aggregating $1000 and payment of
charges as aforesaid receive in exchange a coupon debenture of this issue of the denomination of $1000
any debenture issued in exchange to be of a number not contemporaneously outstanding

"frozen." Frequently, the protective provisions surrounding earlier preferred stock issues and providing against the creation of any mortgage obligations, have cut off all avenues of emergency financing except that of the note issue. Under the circumstances, therefore, it was to be expected that provision would be made for early retirement and that rather drastic protective covenants would be imposed. Some of the commoner provisions have to do with such questions as the following:

1. While the notes are outstanding the company shall not further mortgage or pledge any of its assets except for the acquisition of additional property in which case the "purchase money" obligations are usually limited to a conservative percentage of the value of the newly acquired property.

Some issues provide that no senior security of any sort can be put out while the present issue is outstanding. This has sometimes forced a company to retire low interest bearing notes through the issue of high interest bearing bonds in order to secure needed funds when business conditions have changed. An example of this predicament occurred when the American Agricultural Chemical Company, in the stringent times of January, 1921, found it necessary to retire about $5,000,000 of 5 per cent debentures at 101 (*a premium of 1 per cent*), at a time when it could raise additional much needed funds only by putting out 7½ per cent, first mortgage, 20-year, sinking fund bonds.

It is much wiser to provide, as was done in the recent issue of the $15,000,000, 8 per cent convertible 20-year debentures of the United Drug Company, that no mortgage shall be placed upon any of the assets of the company or its subsidiaries, except purchase money mortgages, unless the present issue of bonds is equally and ratably secured thereby. A rather unusual provision was inserted in the indenture of the $25,000,000, 7 per cent secured note issue of the Anaconda Copper Mining Company, offered at the end of 1920. The company covenanted that:

"It will not mortgage or pledge any of its fixed assets without providing *prior* security for the bonds, and for their payment in *priority* to all other obligations secured by such mortgage or

pledge, and will not permit constituent companies to mortgage or pledge their fixed assets unless the obligations secured thereby (other than those issued in renewal of existing obligations) are pledged under the trust agreement."

2. The *net tangible assets* of the company shall be maintained at an amount equal to at least 200 per cent of the outstanding notes, while the ratio of quick assets to current liabilities shall not be allowed to fall below a certain stipulated minimum. Sometimes it is required that the "working capital," or *net quick assets,* shall always be kept equal to or greater than the amount of notes outstanding.

It is interesting to find that some of the restrictions imposed have later plunged the borrowers into difficulties, inasmuch as adverse business conditions have made it impossible for them to maintain the ratio called for in their indentures. Accordingly, it has sometimes been necessary to issue first mortgage bonds at a high rate in order to secure sufficient working capital to enable the borrower to avoid a technical "default."

Perhaps post-war tendencies in debenture issues are best summed up by the following provisions which surrounded an issue of $8,000,000, 8 per cent sinking fund convertible gold bonds of the Barnsdall Corporation, put out in January, 1921:

NEW ISSUE

$8,000,000

BARNSDALL CORPORATION

8 Per Cent Sinking Fund Convertible Gold Bonds

Dated January 1, 1921 Due January 1, 1931

Tax Refund in Pennsylvania

Interest January 1 and July 1 in New York, Boston and Chicago. Coupon bonds, $1,000, $500 and $100 denominations, registerable as to principal; fully registered bonds, $1,000 and multiples; interchangeable. Callable, as a whole or in part, at 107½ prior to January 1, 1924, during next 3 years at 105, during next 3 years at 102½ and during last year at 101.

Interest payable without deduction for normal Federal Income Tax up to 2 per cent

GUARANTY TRUST COMPANY OF NEW YORK, TRUSTEE

Authorized $15,000,000 Outstanding $8,000,000

SECURITY

The bonds will be issued under the terms of a Trust Agreement with Guaranty Trust Company of New York, as Trustee, which will contain, among other provisions, covenants that while any of these bonds are outstanding:

No mortgage or pledge of Barnsdall Corporation's property or that of any controlled subsidiary company may be created (beyond $2,959,000 existing funded debt of subsidiary companies, part of which is now secured by mortgage).

No bonds, notes, or other evidences of indebtedness of the Corporation or of any controlled subsidiary shall be issued, other than bonds of this issue (and guaranteed bonds of subsidiary companies, under certain restrictions, providing the total debt represented by this issue and such debt of subsidiaries does not exceed the authorized amount of this issue), and other than current accounts, acceptances, or other indebtedness, running for not more than one year, incurred in the ordinary conduct of business.

Total net assets of the Corporation and its controlled subsidiaries shall be maintained equal to at least 300 per cent of the total debt of the Corporation and its controlled subsidiaries, including any guaranteed bonds of subsidiary companies that may hereafter be issued under the terms of the Trust Indenture.

Combined current assets of the Corporation and its controlled subsidiaries shall be maintained equal to at least 125 per cent of their combined current liabilities.

Further bonds are only issuable for not to exceed 50 per cent of cost of additions to property after January 1, 1921, or 50 per cent of additions to working capital, and only provided (*a*) total net assets of the Corporation and its controlled subsidiaries, including proceeds of the new bonds then to be issued, are at least 300 per cent of the total debt of the Corporation and its controlled subsidiaries, including the new bonds proposed to be issued, and (*b*) net earnings of the Corporation and its controlled subsidiaries, after deducting operating expenses and depreciation, depletion and well drilling charges, are equal to at least 3 times their total interest charges including interest on the bonds proposed to be issued.

The remaining authorized bonds may be issued on such terms as the Board of Directors may from time to time determine, including coupon rates, redemption prices, and terms of conversion.

The Barnsdall Corporation agrees to pay interest on these bonds without deduction for the normal Federal Income Tax up to 2 per

cent. The Barnsdall Corporation also agrees to refund the present Pennsylvania 4 mill tax to holders resident in the state of Pennsylvania upon application stating that they have paid such tax on these bonds.

SINKING FUND

The Barnsdall Corporation agrees to make Sinking Fund payments in each year equal to 25 per cent of net income for the preceding fiscal year available for dividends (after deducting drilling, depletion and depreciation charges, interest charges and Federal Taxes), with a minimum to retire $800,000 a year, or, if additional bonds are issued, such larger annual minimum as may be required to retire the entire issue by maturity. The Sinking Fund is to be used for the purchase or call and retirement of bonds. First payment (annual) to be November 1, 1921; thereafter semi-annually. Retirement of bonds through conversion is allowed as a credit to the Sinking Fund for the year in which conversion is made.

CONVERTIBILITY

The bonds are convertible at the option of the holder, at any time prior to maturity or redemption, into Barnsdall Corporation Capital Stock, Class B ($25 par value), at $40 per share (1,000 in bonds convertible into 25 shares of Stock), with adjustment of interest and dividends. If called for redemption, bonds may nevertheless be converted if presented at least 10 days before the redemption date. Class B Stock has voting power with reference to authorization of any increase in the Capital Stock or any change in its par value, and in the event of non-payment of dividends for one year, but has no other voting power. Except as regards voting power, shares of both classes rank equally in every respect, including any distribution of assets and payment of dividends. The Capital Stock of the Barnsdall Corporation is listed on the New York Stock Exchange and on the Pittsburgh Stock Exchange. Class B Stock has sold as high as $43½ per share since May, 1920, when it was listed. In March, 1920, Class A Stock, the only stock then outstanding, sold as high as $50⅛ per share.

Little need be said regarding the length of term of various bond issues. This will depend upon a number of considerations, such as (*1*) the type of business, (*2*) the purpose for which funds are being secured and the length of time needed,

(*3*) the prevailing rate of interest and its probable future trend, and (*4*) particularly the state of the investment market.

Railroads and certain public utilities frequently issue bonds having a very long term to run, since the probable future earnings of the business can be fairly well predicted. Most industrial companies, however, because of the relative uncertainty of their future, issue bonds running for a comparatively short period of years. As a rule industrial bonds should be retired well within the "life" of the property which secures them. Also, when funds are being secured in this manner for "emergency" purposes, such as paying off bank loans, and the like, with a view to strengthening the current position, they should properly run for short terms. On the other hand, the time of maturity should not be made so brief that the company is in danger of being embarrassed to find funds when payment becomes due.

It should also be borne in mind, that the investment market very frequently and potently determines the term of issue of securities. There are times when it is easy enough to put out a 5-year note issue. Recently, however, it was difficult to dispose of debentures running for less than 10 years, while a common term for mortgage bonds of industrial concerns has been from 15 to 20 years. It rarely happens that the bonds of an industrial corporation have a longer term than 30 years.

Of various incidental terms used in reference to funded debt, perhaps *registered* and *coupon* bonds should be explained. Many bonds may be "registered" as to principal or both as to principal and interest. This means that the holder's name and address are recorded in the books of the corporation by the properly constituted authorities, and payment of principal can be made only to the party whose name is thus recorded. The owner's name will then also be written on the face of the bond, and if the security is "fully registered" interest payments will be made by check to the owner. Registration in this way absolutely protects the owner in case of loss of his bond, but because of the delay which must be incurred in connection with any transfer of ownership, registered bonds are not desirable for general stock market transactions and usually sell for a

slightly lower price than *coupon* bonds. *Coupon* bonds are payable to bearer and hence may be transferred almost as readily as bank notes. When interest payments fall due, the holder of the bond merely clips off and deposits the coupons which are virtually checks of the issuing corporation. Usually, coupon and registered forms are interchangeable according to the pleasure of the holder.

The standard denomination of bonds until recently was $1,000 or multiples thereof. There is, however, an increasing movement toward the issue of so-called *baby bonds* having a denomination of $500 or even $100. Stock certificates, on the other hand, are most commonly issued in blocks of 10 shares or 100 shares, the latter being the unit of trading on the New York Stock Exchange. Certificates may, however, be secured for any odd number of shares, large or small, and, whenever ownership is changed, new certificates are usually issued.

CHAPTER VII

RAISING LONG TIME CAPITAL WITHOUT SECURITY ISSUES

Importance of a humble beginning—Large capital not ordinarily needed—Methods of calculating capital requirements—Sources from which initial capital may be secured—Uses to which capital should be put—Importance of keeping the fixed investment low—General rules to follow in the utilization of capital by a small business.

MUCH has been written about the desirability of starting business with an adequate supply of capital. This is no doubt excellent advice, just as it would always be an excellent thing if every man could have an opportunity to choose worthy ancestors. As a matter of fact, the majority of people have very little understanding of the real significance of "adequate capital." Just as the wise man regulates his expenditures by his income instead of by his future prospects, so it is possible for the average business concern to start modestly and progress gradually, even though it must grow from most humble beginnings.

The son of wealthy parents is usually more handicapped than helped by his inherited possessions. In a similar manner the new enterprise, granting that it is really deserving of being launched and is in able hands, will probably thrive best if it does not have an excess of capital. Contrary to the usual statement that most failures result from a "lack of capital," the writer feels disposed, after painstaking study, to conclude that the reasons are as a rule far otherwise, frequently the very reverse. In fact, it is probable that more concerns have failed because of the *wrong use* of the capital which they have, than because of the *lack* of capital.

It is even more true that the average concern gets itself into difficulties because of the too liberal granting and the unwise use of credit. The situation is almost analogous to the phenom-

enon which one encounters during a period of rapidly rising prices resulting from an over-issue of inconvertible paper money. The more money is issued the higher prices become, and the more insistent is the cry for additional money in order to pay the higher prices. Similarly, it very often happens that the more a concern seizes upon the credit facilities available to it, the more pressing is its need for further credit, and consequently the more vital appears to be its so-called lack of capital. In later chapters this seeming paradox will be thoroughly discussed.

At this point it may not be amiss to direct attention to the fact that almost without exception every strong industrial concern—and our discussion throughout the text applies to industrial concerns, unless otherwise indicated, and not to public utilities whose problems are much different—has begun most modestly and has for years labored under certain supposed handicaps resulting from the small original capital. These initial disadvantages and difficulties, however, have but served to develop the initiative and resourcefulness of the founders of the business and have taught them the real value of capital and credit. It is further significant that most financial failures of considerable magnitude are met with in the case of those enterprises which have been launched more or less "full fledged," and which have back of them few years of experience and valuable tradition in dealing with financial questions.

Countless examples of concerns which started with very little and seemingly inadequate initial capital might be cited for the reader's benefit. To give a full list of these concerns would be almost equivalent to recounting the financial history of all the most successful industrial enterprises in the United States! One of the large watch manufacturing companies started with an original investment of $175. The Endicott-Johnson Corporation, until recently the largest manufacturer of medium-grade shoes in the world, is said to have started with considerably less than $2,000 capital. The story of the early struggles of Eastman Kodak is so well known as scarcely to need mention. Eastman had only a few hundred dollars to put into the business at its inception. The Ford Motor Company,

from the financial point of view formerly the strongest automobile concern in the world, started with almost *nothing*. The same assertion might truthfully be made of one of the largest rubber tire companies in the world. One of the wealthiest men in the pottery business at the present time started out for himself, about 30 years ago, with a cash capital of exactly nothing, and with a rather insignificant local backing which enabled him to build his first modest factory. The most successful manufacturer of paper products in the world, which from all points of view furnishes an outstanding example of what "science" can do in business, began about 80 years ago with a capital of only a few dollars. The most profitable musical instrument business of its kind in the United States started little more than 25 years ago with a few hundred dollars. One of the most successful candy manufacturing and distributing businesses was launched not many years ago with a few dollars capital by a girl who had a real "idea." It is scarcely necessary to call attention to the modest beginnings of the Standard Oil Company, the Carnegie Steel Company, and such trading businesses as Marshall Field & Company, Gimbel Brothers, or the R. H. Macy Company.

While it is of course true that the amount of initial capital required will depend very much upon the nature of the business undertaking, and while it was probably easier to begin with a small investment a generation or more ago than at the present time, the fact still remains that great capital resources are not necessarily needed for launching a very profitable and worth-while enterprise, which is destined to grow large and powerful.

Bearing in mind the considerations mentioned in Chapter III, and assuming that the business is really worth while and that the proposed management is in good hands, the three following questions may properly be asked by one who wishes to launch a new enterprise:

A. How much capital is needed?
B. How shall this needed capital be raised?
C. How shall the capital be used?

A. How Much Capital Is Needed?

Let us consider first the unincorporated enterprise. For purposes of financing, wholly new concerns may be divided into two general classes: (*a*) those which may be termed "competitive" enterprises, that is they follow along the beaten path, rendering the kind of service which is already well known, and (*b*) "pioneering" concerns, the purpose of which is to exploit some new process or idea.

In calculating the capital requirements for the first type of business the difficulties encountered are not really great, provided a reasonable preliminary study has been made. Such questions as the following will help to determine the general capital requirements, though of course it is rather difficult to give wholly arbitrary figures in any particular case.

1. What scale of operations is proposed, that is, how large is the business to be at the start?

2. What, approximately, has been the original "investment" in other enterprises of a like sort and size?

3. What, if any, are the particular considerations which will make the proposed investment lower or higher than that ordinarily found for a business of such a sort?

4. Is it necessary to invest in real estate, buildings, machinery, and the like, or can all or a portion of the fixed assets be rented or leased? In general, how much money must be put into so-called "fixed assets"?

5. How much "current" or working capital will be needed? This includes cash, stock ("inventory" or "merchandise," whether raw, finished, or in process), and "accounts receivable" if credit is given. In the beginning, almost all of the working capital must ordinarily be furnished by the owner, and it may be for practical purposes regarded as an initial "fixed" investment. Such questions as the following will indicate some of the primary considerations involved in determining the amount of working capital needed.

(*a*) How long a time must ordinarily elapse between the purchase of raw material and the delivery of the finished product?

(*b*) What are the usual terms of purchase for the supply of materials needed and how readily can purchases be made?

(*c*) Is the process of production a costly one, so that there will be frequent and relatively heavy expenses incurred for labor before the goods can be put on the market?

(*d*) Is the business of a seasonal nature, requiring an extra large amount of working capital at particular periods, or is it relatively stable throughout the year?

(*e*) How large a stock of goods must ordinarily be carried, and what *terms of sale* is it necessary to offer in the "trade"?

There are numerous other considerations affecting the amount of working capital required, all of which will be examined in a later chapter.[1] The foregoing, however, are most significant for present purposes. The type of business will have much to do with the matter. For example, in a retail business which can ordinarily lease quarters, practically the entire investment is in "working assets." Further, it is well to bear in mind the fact that in many lines of business the concern can shape its policies in such a manner as to regulate more or less the amount of capital tied up in this way.

6. What will probably be the developmental expenses, that is, how much must be paid out for canvassing, advertising, interest, wages, insurance during construction, and the like? What is the general competitive situation, and what special expenses may perhaps have to be incurred in order to cope with other producers?

7. How long will it probably take for the business to become a "paying proposition," all things considered? Some types of business make money for the owners from the very start, while in other cases a period of months or even years must elapse before the business becomes "profitable" in the financial sense. Overhead and running expenses continue unabated during this

[1] See Chapter XIII, p. 286, ff.

time. Hence, calculations should be made to include such additional demands on the initial capital, provided the new undertaking must pass through this period of slow "development."

8. In addition to such considerations as the foregoing, it is well to make rather liberal allowance for contingencies of different sorts, since it is utterly impossible to forecast all the expenses and outlays of a beginning business. Furthermore, the one who is responsible for raising the initial capital should, as a rule, have in mind some definite plan for further financing if necessary. At any rate, he would do well to assure himself that additional funds can be secured if needed, without running wholly unwarranted risks.

9. It is vastly important to study the general business conditions at the time when the new enterprise is to be launched. Because of the rapid changes in the price level, all of the calculations made as of a certain date may be found to be wholly unreliable. The available figures covering the costs of production and investment in fixed property, may have been effective in years of lower or perhaps higher prices than at present exist. Very serious miscalculations have frequently been made because of the failure to recognize the changes in the Business Cycle. Also, in calculating working capital requirements, it is most important to know whether the selling price of the commodity to be produced is tending *gradually* or *rapidly* upward, or is, on the other hand, steadily dropping. More working capital in the aggregate will be needed in the former case, though during the beginning of a period of prosperity it will be safe to risk operations on a narrower margin than when prosperity is at its height or on the decline.

10. Finally, the wise man, in launching an enterprise of this sort, will wish to assure himself that even if worst should come to worst, and the general elements in the situation should "break" against him, he will still have enough to "see him through."

It is probably true that the great majority of newly launched enterprises have not carefully estimated their capital require-

ments along the suggested lines, since very few even make the preliminary analyses indicated above in Chapter III. If, however, all of these considerations were kept in the foreground, it is probable that comparatively few businesses launched in old fields would fall by the wayside. As a matter of fact, relatively few would be launched.

On the other hand, the fact cannot be too frequently stressed that in many lines of business, the initial capital required is far less than is commonly supposed. This is particularly true of retail enterprises, the most successful of which at the present time almost without exception started with an insignificant initial investment. Indeed, too much capital or credit seems almost to throttle an incipient retail business. Further, even for many types of manufacturing concerns, it is frequently possible to start much more humbly than the owners ordinarily wish to do. However, in this connection it is well to remember that, in many lines of manufacturing, there is a *size* below which it is not safe to go, if one expects to make profits. This is true because of the fact that, up to a certain point, the fixed charges are so high relative to the operating expenses that goods cannot be produced at a sufficiently low cost to enable a profit to be made.

As regards the pioneering enterprise, most of the questions already raised for the "standard type" of business may properly be asked. In many cases, however, no definite answers can be given as to the amount of capital needed. About all that can be done is to make a shrewd guess on many matters of importance. It is usually easier to decide the amount of "fixed" investment in a case of this sort, granting that such investment is absolutely necessary, than to forecast the amount of "working capital" needed. It should be borne in mind, however, that the concern which wishes to exploit a new article will normally find all of the contingent and developmental expenses greatly increased. It is particularly important to raise such questions as the following:

1. What will it cost to produce the new commodity or render the new service?

2. What methods must be used to create a market for the new article?

3. Is it probable that the demand once created will increase of its own momentum, or must the "market" be constantly "stimulated"? Is it probable that the demand may for a time decrease after the initial stage is passed?

4. Will money be immediately needed for further development of patents, or for protecting those already secured?

The pioneer in business sails a more or less uncharted sea, but he can readily equip himself with all the instruments needed in order to steer his course in accord with the lessons learned from the experiences of the past. The inventor, carried away by a perfectly pardonable enthusiasm, is usually too eager to launch a new enterprise before the purely experimental stage is passed. While it has been estimated that probably 90 per cent of the production of our industry is dependent upon patents, it is also true that an even higher percentage of all patents have proved wholly futile in the economic sense. Enterprises launched to exploit basic and worth-while patents and processes have almost invariably started with very little capital. Also, most really important patents have required years for development before reaching the stage when there was any justification for "launching" them before the public.

Before examining briefly various methods whereby initial capital may be secured for a privately financed and unincorporated concern, one rather common assertion should be further noticed. The statement is frequently made by writers on finance that it is almost suicidal to launch a business without sufficient capital to "see it through." The fact is sometimes stressed that the concern which raises only enough funds to build its plant and perhaps install its equipment, without making ample provision for working capital, frequently "fails" in the very act of being launched, because of the great difficulty in securing additional funds in order to begin operations.

No doubt it is ordinarily easier to influence outsiders to invest in an enterprise before it is actually launched than when it has been only partially launched, and has been forced to sus-

pend operations because of the lack of sufficient capital. In such an event, the judgment of the owner or promoter may be seriously questioned. All this is perfectly true in the case of a concern which is dependent upon various public sources for its financing, and which raises its capital by means of security issues. However, when a business begins, as most all businesses should, as a modest enterprise, privately financed and closely owned, the same arguments scarcely apply. It is certainly desirable to have sufficient "capital" to see through a worthy project of this sort, but there is no question of public psychology to be reckoned with if the capital requirements have in the first place been underestimated. It is, therefore, always much easier to progress slowly and economically when a concern is not publicly financed, and this is one of the very strong reasons in favor of introducing a new enterprise quietly and modestly, until it has had an opportunity, through the quality of service rendered, to make a wider appeal for funds.

B. How Shall Long Time Capital Be Secured for the Unincorporated Enterprise?

A privately owned and unincorporated business may raise its initial capital in some of the following ways among others: (*1*) through the savings of the owner; (*2*) by borrowing either (*a*) from friends (frequently on promissory note), or (*b*) from banks on collateral which is acceptable to them; (*3*) by getting long time credit from dealers who sell needed equipment or supplies; (*4*) by securing payment in advance from customers for orders placed; (*5*) through the combined capital of two or more partners; and (*6*) by advertising and attempting to enlist the investment interest of the public in the scheme. There are of course various other methods, but the first and fifth mentioned are the most common and of greatest significance.

1. From preceding discussions it should be evident that the soundest method of financing a small, new, unincorporated enterprise is by means of the personal *savings* or accumulated property of the individual who launches the business. One

who has learned to save money usually has some idea of the value of money. It was a wise statement, attributed to James J. Hill, the great railroad builder, that a new power is born into the world when a man saves his first thousand dollars. This is literally true.

It is further true that ninety-nine times out of a hundred the man who saves a thousand dollars or any other amount, would be a fool to invest it in an enterprise which he himself expects to launch or operate! It is far easier to save money than to invest it wisely, and comparatively few people have the knack of making their savings grow by means of the independent conduct of business. The average man is better qualified to work for someone else than for himself. Yet if he *must* break into business he should by all means employ his *own* capital. No man should be trusted with the savings of others until he has shown ability in investing his own.

One of the prime tests of a man's capacity to *use* money in business and to direct the flow of capital, is his ability to save. Further, perhaps the most fundamental credit test applied by the banker to a prospective borrower, is the question as to whether he is able to *save* money—not merely whether he is able to *earn* money. Hence, there is some reason for supposing that a man who has enough confidence in an enterprise to put his own money back of it, will do his utmost to conduct the undertaking in such a way as to make it financially successful. At any rate, under such circumstances one of the important factors making for success is present. Once more the warning should be repeated, however, that many a man has thrown away the savings of a lifetime on some perfectly fatuous scheme launched and operated by himself. This much is certain, the man who launches an enterprise with a good "nest egg" of savings accumulated by himself will be in a very favorable position to secure credit later or to enlist the aid of others in an investment capacity. These considerations are fundamental for any business, and the principles involved apply no less vitally to the large corporation than to the small, little known concern.

In this connection, one important and frequently most successfully used device is for the individual owner of the new en-

terprise to develop his business during his leisure time and odd moments snatched from some other employment upon which he is dependent for a livelihood. After a certain point has been reached, such a division of interests may naturally tend to cause less attention than is desirable to be given to the main occupation, but any man can take his chance in a matter of this sort. It is highly important for the individual not to risk his present and assured position in order to launch a new enterprise, particularly if it carries a good deal of risk with it, until he has sufficient opportunity to get his financial "bearings." Many a successful enterprise has in this manner been originally launched under the aegis of a paying business which the owner did not find it necessary to relinquish until he could feel reasonably assured of the outcome of his new proposition.

2. It is sometimes possible for an individually owned enterprise to secure the backing of relatives or friends who do not care to enter the business as partners, but who are willing to take a chance on the ability and character of the owner. In such cases, money is sometimes advanced on promissory notes without any security. It more frequently happens, however, that the owner, not having sufficient funds of his own readily available, will supplement his free capital by borrowing on collateral, such as his insurance policy, or by means of a mortgage on his house. Frequently additional funds have been raised from the local banker by the deposit of a mortgage on the "fixed" assets of the new business. Thus, the needed and more or less permanent working capital has sometimes been raised.

3. In certain lines of enterprise it has in normal times been possible for the beginner to finance himself partially through the extension of long time dealer's credit in connection with the supply of equipment needed in the business. This has applied particularly to such operations as the printing business, in which notes for presses and similar equipment have sometimes been given, payable in instalments over a period of two or three years. Various classes of retailers, also, have sometimes secured their equipment and initial stock of

goods in this way, hoping in due time to pay back out of earnings the capital thus advanced. This practise, formerly more common than at the present time, has sometimes enabled wholly unwarranted enterprises to be launched, and has no doubt led to injurious competition and many failures. Though the practise may apparently lead to larger sales by the manufacturer or dealer who extends the credit, it is usually unsound in principle for such concerns to assume the functions of a bank or of the investing public. Old established concerns in the field may also suffer as a result of ignorant competition, made possible by this easy method of raising capital.

Any credit policy of this sort is likely in the long run to be unwise. Particularly pernicious is the practise frequently followed by those who sell goods to a beginning concern, in accordance with which the owner is encouraged by the salesman to put in a larger stock than is needed. Credit is then extended over a considerable period of time upon the security of a promissory note, or perhaps a lien on the current assets of the business is taken. In this manner not only are cash discounts lost to the business, but excessive capital is frequently tied up in slow moving stock.

4. It is sometimes possible for a small, locally operated manufacturing business to secure from friendly customers advance payments on orders to be filled. This is a method of throwing on purchasers the burden of providing initial working capital, and depends almost solely upon the personal equation. It can doubtless be most successfully followed when customers can be given some investment interest in the business.

5. While the individually owned and controlled enterprise is numerically by far the most common, yet it frequently happens that the single owner does not have and cannot command sufficient capital to enable him to launch the business. Under these circumstances the natural course is to find one or more *partners* who can be called upon to supply the necessary balance of capital. Various partnership agreements can be made, and for practical purposes the partners taken in may be "active" or "sleeping." There are sometimes friends who have

sufficient confidence in the financial ability of the owner to be willing to entrust to his use a certain amount of money without themselves wishing to take an active part in the administration of the business. Their liabilities, of course, would ordinarily be unlimited and the profits would be shared *pro rata.* It is possible, however, to make some salary adjustment which might compensate the "prime mover" of the business for his greater responsibility.

From another point of view, it may be possible and highly advantageous for a man who finds himself lacking in certain qualities which make for the success of a business, to unite his abilities and capital with another person or group of persons who can supply those qualities lacking in himself. For example, the inventor is usually a wretched financier, though he may be an excellent salesman. In the majority of cases, also, one who is a first-class salesman may be of the type which will wreck a business financially. A good production engineer too frequently thinks in terms of technical formulae and machinery output rather than in terms of general finance. Hence, it may be very practicable to secure the financial cooperation of two or more men whose abilities and capital supplement each other in a most desirable fashion.

Taking in a partner, however, is a most serious undertaking. It is highly essential to be fully assured of the particular type of his ability, of the nature of his personality, and most of all of his absolute integrity. It is necessary to look carefully into the history, personal habits, and business methods of the proposed partner, and to find out about his family, friends, and personal ambitions. Many a struggling business has been wrecked on the rocks of an incompatible or untrustworthy partnership agreement.

Sometimes it is possible in the very beginning to get in touch with the right type of partner through advertising, though a satisfactory contact secured in this way is largely a matter of chance. Needless to state, it is usually out of the question for an unincorporated concern at its inception to raise capital by means of advertising and a general public appeal.

6. The method of raising initial capital by means of newspaper advertising, appeal through the mails, or personal solicitation among strangers, can rarely if ever be used by a sound business concern. Hence, this device is merely of incidental interest. However, it is well to remember that many swindling projects, operated by individuals or organized as so-called "partnerships," "voluntary associations," or "investment trusts," thrive as a result of their attempts to bait "suckers" in this way. The method is particularly common among wildcat oil and mining schemes. In this line of activity it is indubitable that "age does not wither, nor custom stale their infinite variety."

C. How Shall the Capital Be Used?

As to the third question raised, "How shall the capital be used?" the answer can better be given at the end of this volume than at the present time. However, a few suggestions may here be made which will apply equally and for all time to all types of concerns, whatever their form of organization, whatever their age, and whether they be large or small. Some of the rules which should constantly be borne in mind by the newly launched enterprise without a background of experience, as well as by the older concern, are stated in negative form. Like the ten commandments they are frequently, almost universally, broken, but they are none the less fundamentally sound and have back of them the sanction of centuries.

1. Keep the investment in fixed assets as low as possible. Rent buildings and real estate whenever practicable, until such time as the *future* of the business is assured, as a result of its past financial success. The building and equipment of a manufacturing concern may be utterly useless for any other type of business. Hence, the fixed assets may have only "scrap" value, if for some reason the business must cease to operate. Further, after a time it may be found that it is desirable to change the location of the plant. This can be done only with great expense and loss when capital has been already sunk in fixed assets.

It is true that for certain types of business, impressive quarters and fine equipment may be highly essential in order to attract customers, and may make such an impression upon the public that the credit position will be strengthened. However, this possibility applies ordinarily only to trading and banking concerns in certain localities, and even then, as a rule, only after reasonable maturity has been reached through long years of development. Fine buildings and equipment for the average beginning concern will probably do more to ruin credit and uselessly tie up much needed capital than any other single thing. Many of our most successful enterprises had their actual beginnings in cellars, kitchens, bedrooms, attics, sheds, barns, and abandoned factories.

The rules which should ordinarily govern in this regard are much the same for business finance as for personal finance. The judicious man will be more interested in "substance" than "front." He will not put all of his possessions on his back or in the show case. He will conserve his resources and increase them by careful husbandry until such time as his assured income is sufficient to enable him without running risks to invest in a beautiful home and lavish equipages. In like manner, the chief concern of the beginning business should be to render *service* to its customers. Granting that the commodity dealt in is of a tangible sort—not to be consumed on the premises as in the case of hotels, theaters, restaurants, and the like—impressive quarters have apparently little if anything to do with the satisfaction of the customer. Provided he receives courteous attention, prompt execution of his orders, and superlative quality, he will be happy.

2. Do not invest any more than is absolutely essential in inventory. The usual mistake made by the beginner in business is to overstock himself in the thought that he is "getting a bargain." Experience has shown that the only real bargain in inventory is normally as *small* a stock as circumstances will warrant carrying, with a very rapid turnover of that stock. No man, least of all a beginner, can safely take chances in this matter, nor can he to advantage speculate on the probable rise in prices of the material which he buys.

3. Do not invest money in accounts or notes receivable if this can possibly be avoided. Many a concern cripples itself in the beginning by giving *credit* to its customers whereas it should give *service*. It is easy to mistake the former for the latter. As a matter of fact, in most cases, particularly in the retail business, nothing worse can happen to a new concern than to secure business by means of a too liberal extension of credit. The new business, or the old business either for that matter, is not in the position of a bank. Its function is to manufacture and sell goods, not to furnish customers with funds. Being itself hampered for capital, it is absurd to take needless risks which may imperil both capital and credit. To be sure, the custom of the trade in certain cases makes it necessary for manufacturers to extend a considerable amount of credit. However, the rule above suggested, various aspects of which will later receive more detailed attention, is of vital importance.

4. A concern should always keep a good supply of cash on hand, the relative amount of which depends upon the nature of business carried on. No concern can take its cash discounts on purchases without having ample cash on hand. In many lines of business the annual profits are said to be almost wholly made as a result of taking the cash discounts. Nor can the beginning concern, as a rule, hope to utilize bank credit in order to pay for the purchase of goods and thus take advantage of the cash discount privilege. It is only after a demonstration of earning capacity that the commercial bank can be resorted to, and the smaller businesses are comparatively rare customers of the bank, whether they be new or old.

Of course it is possible to go to extremes in the matter of keeping a large cash reserve. For example, the writer knows of one exceedingly cautious business man, rather ignorant of methods of financing, who used to keep an extraordinarily large cash balance in the bank, but never borrowed. Some of the merchants from whom he purchased goods, finding out this situation, formed the habit of calling upon him for payment of his bills before they came due in accordance with the terms of sale. Nor did they grant any special discount for this extra

prompt payment. In this manner the individual in question was really furnishing working capital for those from whom he purchased goods, and acting as their banker. His position was extremely safe and his credit was always A 1, but of course he failed to make as large profits as he might otherwise have done.

No one should go to such extremes in the matter of keeping large cash balances. But vigorous exception should be taken to the assertion commonly made by some *pseudo* authorities on finance, that the new business should not keep an over-supply of "cash" and should see to it that its cash is being constantly "turned over" and utilized to its utmost capacity. No counsel can be more pernicious. The new business man will take enough risk without any urging. His usual difficulty is to find enough cash to pay his bills and to maintain his credit, not to discover clever methods of utilizing that cash. The beginner in business cannot safely take chances in this matter, nor does he as a rule have an adequate conception of the proper uses of credit. In this connection it should be noted that in normal times some of the strongest and best known business institutions in the country have on hand huge cash balances amounting to millions of dollars on which they are receiving apparently little return—a practise which in the long run frequently turns out to be a most far-sighted investment. The significance of this situation will be pointed out in later chapters.

5. Do not expend too much money in a top-heavy marketing program. There is a tendency for small manufacturing concerns, particularly when they are promoted by salesmen and inventors, to formulate an elaborate and top-heavy sales program, the carrying out of which may wreck the business. Here again the start should be gradual and simple, until such time as the market has been sufficiently "felt out," so that it will be possible to know in what manner advertising and selling appropriations may be most effectively employed.

6. Another point which cannot be over-stressed is the fact that a new concern should concentrate on the object for which it has been launched, at any rate until such time as it becomes apparent that definite changes in policy must be made in order

to insure the success of the business. There is too much temptation to take on side lines which may or may not be profitable and thus divert capital and energy into channels wholly foreign to the main enterprise.

7. All funds should be expended only after careful planning and consideration of the general needs and prospects of the business. As the concern begins to grow, and if properly conducted it will ordinarily grow from the day of its launching, the owner should maintain a rationally pessimistic point of view regarding his own financial position, tempered by a good deal of optimism regarding that of his competitors. He should not, however, permit his pessimism regarding his own affairs to dampen his ardor or divert his energy from the main goal, any more than he should permit himself to be discouraged by the liberal estimate which he may put upon the activities of his competitors. It is a safe rule in business to maintain an optimistic front with a rather pessimistic back; to regard one's business frequently from the competitor's point of view and to think of one's assets from the lender's point of view; to be niggardly in the valuation of one's assets and rather generous in the estimation of liabilities. In fact, the man who makes money in his business, whatever his apparent attitude may be, is ordinarily the one who thinks and acts in a manner almost diametrically opposite to that which is popularly supposed and ordinarily advocated by the unthinking. It is an excellent rule always to be prepared in business for the worst that can happen. Anything short of this will then come as a pleasant, though not altogether unexpected surprise, and the cumulative effect of such financial results cannot help but be wholesome.

There is nothing particularly interesting and certainly nothing spectacular about beginning a business in the manner indicated. From the financial and long run point of view, however, no mistake can be made if these rules are strictly observed. Businesses financed and conducted along these lines are seldom worried by creditors or by stock market activities, and they may grow to very great size. Such concerns have few

"financial problems" in the commonly understood meaning of that term. There are many highly successful private enterprises of this sort, whose annual profits run into thousands and hundreds of thousands of dollars. Some of them are not even rated by the usual credit reporting agencies. Further mention will be made concerning this type in a later connection.

CHAPTER VIII

RAISING LONG TIME CAPITAL BY MEANS OF SECURITY ISSUES

Reasons for issuing securities—A. Bases of capitalization—Value of assets—Actual cost or "investment"—Capitalization of earning power most satisfactory for industrial concerns—Difference between the problem of capitalization in public utility companies and industrial companies—Capitalization of intangibles—Patents, trade-marks, good-will—Over-capitalization—Under-capitalization—B. What type of securities shall be issued?—C. How shall the securities be marketed?

THE preceding chapter discussed methods of raising long time capital which are open to new *unincorporated* enterprises. The underlying principles developed will apply with equal weight to the corporate form of organization. The present chapter, therefore, will assume a knowledge of the rules of long time finance just discussed, and will deal primarily with the question of raising funds for a new concern by means of security issues. Many of the subjects discussed, for example the questions of *capitalization,* valuation of *intangibles,* including *good-will,* patents, and the like, will be of even greater interest in considering the problems of the already established concern which is seeking additional capital. More particular attention, however, will be given in Chapter IX to the methods of raising new capital for an established business.

As already suggested, there is probably no good reason why the majority of small businesses should incorporate. Many of them do so for a number of reasons. Sometimes the individual owner merely wishes to protect his other possessions in case of failure, by limiting his liability. In many instances the proprietor of a "one horse" business incorporates with a relatively high "authorized" capitalization because of a certain pride which he takes in styling himself the chief officer of a corporation with a capital of such and such an amount. Such form of

organization makes it possible for him to place a few of his relatives on the board of directors, or to find places for them as officers.

Frequently, however, there are more important financial reasons for incorporation and the issue of securities. In the first place, the owner may not be able to secure a sufficient amount of funds properly to establish his business except by taking in partners. This, for a number of very good reasons, he may not wish to do, or it may not even be possible for him to raise the needed capital in this way. Further, he might not be able to keep control of the business if he should find it necessary to enlist the financial support of outsiders. In order, therefore, to raise additional funds the business is incorporated and a definite number of shares of stock is authorized by the company's charter. The man, or men, "promoting" the concern may then, within certain rather indefinitely defined limits, raise long time funds as they see fit. It is particularly common for the inventor of a new process or piece of machinery to wish to keep control of his patent by raising money to finance the development of the invention through the sale of stock in such a manner as to put in his own pocket one share for every share sold. Ordinarily the promoter or inventor will put a very high estimate on the value of his own contribution to the business. Under such circumstances, therefore, to finance by means of security issues of different types affords a far more flexible and satisfactory plan than to attempt to raise money through the appeals that can be made by an unincorporated enterprise. At the same time, the ease with which a concern may incorporate leads to countless financial abuses, some of which will presently be pointed out.

Whatever the reasons for incorporation may be, and whether the concern be large or small, the amount of "capitalization"—which for a beginning concern usually means simply the "authorized capital stock"—is determined by those primarily interested in the business before the articles of incorporation are filed. The amount of "capital stock" which the company is permitted to issue then appears in the charter granted by the state. This entire amount of capital stock may be "issued"

immediately or a large proportion may be held in reserve for purposes of future financing, in which case it is sometimes popularly though wrongly designated as "treasury" stock. The relation existing between the amount of *authorized* "capital" (more accurately referred to as "capital stock"), and the *actual issue* in various years is indicated by the following tabulation covering the years 1919-1926 inclusive—evidently the "promise still outruns the deed:"

AUTHORIZED CAPITAL OF NEW COMPANIES WITH A CAPITAL OF $100,000 OR MORE *(Journal of Commerce)*

1919	$12,679,000,000
1920	14,999,000,000
1921	7,959,000,000
1922	8,400,000,000
1923	9,371,000,000
1924	7,225,000,000
1925	9,881,000,000
1926	10,947,000,000

TOTAL SECURITY ISSUES OF NEW AND OLD DOMESTIC COMPANIES, INCLUDING BONDS AND NOTES AS WELL AS STOCK—REFUNDING EXCLUDED *(Commercial and Financial Chronicle)*

1919	$2,246,000,000
1920	2,564,000,000
1921	1,701,000,000
1922	2,212,000,000
1923	2,648,000,000
1924	3,029,000,000
1925	3,604,000,000
1926	3,754,000,000

In passing, it should be noted that for purposes of discussion in the present chapter a "new" concern is generally understood to be one which is just getting its start for the *first time*, not a company formed out of an old business through changes in ownership, combination, or in some such manner. Also, to avoid misunderstanding in the use of terms, it should be pointed out that the average "brand new" industrial company does not and cannot issue any type of "security" but stocks. Here, as elsewhere in the book, the discussion does not take up the problems of public utility and railroad financing.

Three questions may properly be asked in connection with the financing of new concerns or old concerns by means of security issues:

A. What shall the capitalization be? That is, for a new concern, how much stock shall be issued?

B. What form shall this capitalization take? Namely, what shall be the type of securities and their terms of issue?

C. To whom shall the securities be sold, or how shall money be raised through the sale of securities?

A. Bases of Capitalization

How does a concern decide upon the amount of its "capitalization"? This is practically equivalent to asking, "What is the basis of the capitalization of industrial concerns?" The apparently simple reply to the question raised would be that the capitalization should be regulated by the amount of money required to launch and comfortably operate the business, and that the par value of the capital stock actually issued should be equal to the "cost" of the newly launched enterprise. In other words, the stock should represent the *bona fide* investment of money or its equivalent in the business. If stock of no par value is issued, the same relation would be expressed by saying that the aggregate amount received for the shares outstanding should be invested in the "property" of the company and fully accounted for on the asset side of the balance sheet.

The general problem, however, is by no means so simple as this. There are a number of different methods of "capitalizing" a company, depending upon the *bases* used. In discussing the financing of industrial concerns as opposed to public service enterprises, the following *bases of capitalization* may be mentioned:

1. The *value* of the assets.

2. The actual *cost* of the property, both tangible and intangible.

3. The *earning power* of the business.

1. The first basis of capitalization indicated, "the value of the assets," needs merely to be mentioned in the present discussion. It is perfectly obvious that there is no definite or

necessary relationship between "value" and "cost" in an industrial enterprise. Further, the value of the assets of an industrial business, for reasons already explained, will in the long run depend largely upon the net earnings of that business. Hence, this does not afford an independent basis for capitalization.

The question of "valuation" of assets, however, sometimes becomes immensely important in connection with "recapitalization" of an old concern and the issue of new securities. Frequently a post-war revaluation of assets by some engineering firm has made it possible for a business apparently to improve its credit position by "writing up" its tangible assets in such a manner as to indicate a very handsome surplus on the books, whereas otherwise it would have been necessary to show the deficit which had actually been incurred. Such methods, as will be pointed out later, are most reprehensible if not ridiculous from an economic point of view. Yet the fact cannot be denied that some companies have even managed to float new *bonds* as a result of the supposed "appreciation" of their assets, certified to by an "appraisal" company. On the other hand, not only have proposed new security issues often been made impossible, but credit has even been withdrawn, as a result of the findings of appraisers appointed by bankers financially interested in certain companies which had misrepresented the value of their assets or had permitted them seriously to deteriorate without making due depreciation allowances.

The "value of assets," however, never has been and probably never will be a recognized basis for corporate capitalization, not merely because of the fact that values are constantly shifting, but also because "value" in itself is a wholly intangible concept, which frequently depends primarily on the earning power of an industrial concern and rarely upon "cost" or "investment" in tangible assets.

2. For the simplest types of industrial enterprises, it might be perfectly possible to strike a reasonable balance between "capitalization" and *actual cost*. Beyond a doubt a new enterprise should be conservatively capitalized on the basis of assets paid in. "Cost" in this sense should cover everything, whether

tangible or intangible, which has actually and honestly been paid for either in money, goods, or services, including under certain conditions the expenses of development, and would represent the real "investment" of the owners. It is no doubt true that a well managed and evenly growing concern might consistently keep its capitalization set up in such a way as rather closely to balance the original cost. As time goes on, however, the chances are that the cost of the assets owned by the business might be very much more or very much less than the "value" of those assets in an earning sense.

Nor does the cost of the property have anything whatever to do with the earnings out of which dividends can be paid on the stocks and bonds issued. An "investment" unwisely made might result in the construction of an excellently equipped factory in a wrong location, where it would be impossible to operate because of costs of production too high to permit the company to earn any profits in the competitive market. Hence, though there might be never so fine a balance between the "capitalization" and the "cost" of the beginning business, in the investment sense, the capital stock of the company might be practically valueless no matter how much money had originally been paid in and honestly expended. On the other hand, due to some happy fortune, such as the development of an unexpected demand for a certain commodity or the discovery of improved processes in production, a modest company with an inexpensive plant and a correspondingly small amount of stock outstanding, might find itself earning several hundred per cent on the par value or paid in value of that stock, the market value of which would then be very high. What, in a case like this, would be the "value" of the assets of the business? What would be the relation of this value to the cost? And if, after a time, a change in ownership were to be effected, what should be the basis of capitalization?

CAPITALIZATION OF EARNING POWER

3. For many purposes it really makes little difference what theoretical basis of capitalization is chosen for the issue of

stock. The foregoing discussions, however, point to the greater practicability of the method of "capitalizing" an *established* industrial business according to *earning power*.[1] This phrase "earning power" is delightfully vague and sufficiently elusive to permit of all the flexibility in the world, without the possibility of causing much serious difficulty. When earning power serves as the basis of capitalization it may be (*a*) past, (*b*) present, or (*c*) prospective. Prospective earning power may be either "probable" or "possible."

Naturally, a wholly new enterprise cannot capitalize past earning power, nor does it actually have much present earning capacity. Hence, the only course open to the company which uses this basis is to capitalize *prospective* earnings, generally unsound though the practise be. Thus stock may be issued on

[1] Again, the reader's attention is called to the fact that no attempt is made in the present volume to discuss the peculiar problems of public utility finance. Obviously it would be absurd for a public utility company to be capitalized on the basis of earning power, due to the fact that its rates are subject to public regulation. If "earning power" were accepted as a basis of public utility capitalization or valuation by the regulating body in arriving at the theoretical fair return, to which, according to the law, a public service corporation is entitled, it is apparent that the cart would be leading the horse. Since values arrived at through the capitalization of earning power depend upon the amount of that earning power, and since the rates which yield the net earnings are regulated by the commission, the regulating body could itself pre-determine the "value" of the "investment." Carried to the logical extreme, the commission could in fact fix rates at such a point that no net earnings would be realized, as a result of which the value of the property could be reduced to zero. Obviously, therefore, a basis of valuation independent of earnings must be chosen in the case of public utility companies.

A common practise is to value public utility properties on the basis of the present cost of reproduction less accrued depreciation. From the investor's point of view, however, it is probably fairest to arrive at the value for rate-making purposes on the basis of the "original investment," the amount of deduction for depreciation depending primarily upon the manner in which the physical property has been maintained.

Beyond a doubt it is desirable in the case of public utility companies that the relation between the "original cost" and the capitalization be held as nearly as possible in even balance. To the extent that this end can be accomplished, the problem of arriving at "fair rates" for service will be considerably simplified. The old Board of Gas and Electric Light Commissioners of Massachusetts consistently followed the policy of requiring that no securities could be issued in excess of the actual value of assets paid in. Thus it has been unnecessary for them, except in rare instances, to trouble themselves at all about the question of "valuation" in connection with rate regulation. It has simply been necessary for the Commission in practise to allow a reasonable return on the capital stock plus paid-in premiums.

the basis of the *probable* earnings as determined by a study of the financial results of similar enterprises. The company entering a wholly new field will have little to guide it in this matter aside from the hopes or fears of its promoters, and the capitalization may be made either high or low depending upon the particular circumstances and the nature of the appeal which is being made to the public. Finally, wholly speculative or fraudulent concerns will customarily paint the rainbow and capitalize the wildest dreams of what might happen under fancied circumstances which can never be attained.

In arriving at a conservative capitalization on the basis of earning power, a new business might estimate the probable gross income in a typical year after the initial stages. From this amount would be deducted all the operating expenses. Due allowance would also be made for the various "fixed" charges, such as taxes, interest, insurance, depreciation, and the like, and liberal reserves for contingencies should be provided. The remaining portion of the year's gross revenues might then be regarded as the net income which could be capitalized on the basis of what is considered a fair return on investment subject to that particular degree of risk. If, for example, net earnings of $100,000 were indicated (terms are here being used in their popular meaning rather than in accordance with strict accounting terminology), and if 10 per cent were regarded as a satisfactory return for capital invested in such enterprises, this amount might be capitalized at 10 per cent, that is, the net earnings would be regarded as the income from an investment yielding 10 per cent. This computation would indicate $1,000,000 as a reasonable *par* value of stock to be issued. The principle is sufficiently clear.

Needless to say, however, few calculations work out so simply as this. There may be numerous other considerations which will affect the problem. A conservative business would scale down these figures considerably, while the wholly speculative company would try to find sufficient justification for increasing the amount of stock to be issued.

CAPITALIZATION OF INTANGIBLES

It is perfectly apparent, however, that if such a basis of capitalization is used, there will not necessarily be any close relation between the par value of securities outstanding and the *tangible* assets of a company. The latter *may* be much greater but are frequently much less than the former, even in well managed companies. Thus the question is immediately raised as to what items among the assets will offset a capitalization which is in excess of the tangible property. To answer this question, brief consideration must be given to the chief "intangible" items which find their place on the balance sheets of many industrial concerns, and which in many perfectly sound companies serve to explain the high "capitalization." These items are primarily *patents, secret processes, trade-marks,* and *good-will.* Often it is a very vital question to know what valuation if any shall be placed on such items, particularly in cases of reorganization or of changes in ownership.

The easiest way to deal with this subject of "intangibles" in discussing the financial problems of new concerns, would be to assert unqualifiedly that there are no intangible assets in a business starting *de novo.* From a sound financial point of view this is literally and almost invariably true. Even if the statement were a slight exaggeration, conservatism would call for a strict adherence to the principle that until a company has been able to show, through its superior earning power over a long period of time, that it has a financial advantage over others which it may be safe to capitalize, it has no business whatever to put any value on its patents or trade-marks or to admit that it possesses any good-will. Many a wholly new enterprise, however, values its patents at an enormously high rate, while the best managed and thoroughly seasoned companies frequently aim to amortize their intangibles as rapidly as earnings will permit. In case of liquidation intangibles are rarely a realizable asset, even though originally paid for at a high price.

VALUE OF PATENTS AND PROCESSES

Naturally, when a new company is incorporated, whose chief purpose is to exploit an invention, the promoters arouse the interests of the public or the possible investor by putting a very high estimate on the earnings which will accrue from their patent rights. At the present moment two or three rather interesting examples come to mind.

One is that of a little ice manufacturing concern newly launched, the purpose of which was to demonstrate an improved method of refrigeration. The men directly interested in this proposition were really most conservative individuals, but a recent balance sheet showed that their patent rights were entered on the books at exactly three times the entire tangible assets. The amount of common stock outstanding exactly covered these patent rights, while all tangible assets were represented by preferred stock. This method of handling the situation is a very human and perhaps pardonable practise, though it was rather extravagant, under the circumstances, to waste so much paper on common stock issues! A much more striking example is furnished by a recently launched concern which, with liberally valued tangible assets of about $150,000, calculated patents at a value of $4,148,069! It should in fairness be stated that this latter concern was carrying on a very useful kind of work and was managed and was promoted by honest men. However, since the company at the time operated only at a deficit, it was rather absurd to find the patents included at so high a figure, even though in this case the exaggeration seems to have been perfectly harmless.

In striking contrast to the policy followed by the above company is that of a famous concern manufacturing gear shapers, which has for the last generation stood foremost in its field. The strength of this enterprise depends very largely on its patents which have been developed at great expense over a long period of time. Yet no value whatever has been placed on these patents in the books of the concern, and it has not yet

been incorporated. Recently, when a firm of engineers was asked to make an appraisal of the business with a view to organizing it as a corporation, they found by careful estimate that the unquestionable value of the intangibles would be at least 60 per cent of the total value of the business as a going concern, of which practically the entire amount could properly be attributed to the patent rights owned. This figure was arrived at, roughly, by finding out the total investment in the business to date, and then ascertaining the average net income over a period of years which the business had earned in excess of the usual return on investments in a more or less similar line of business. The average life of the patents was then estimated, and by means of amortization tables the present value of the patents yielding the excess income was computed. The proposed capitalization was thus put on a very conservative basis. It was found as a result of these computations that the concern might probably save itself in the aggregate hundreds of thousands of dollars in taxes by incorporating and capitalizing its intangibles to the full extent. Thus it would have been possible to report as part of the invested capital intangibles not in excess of 25 per cent of the total stock outstanding.

By July, 1924, the United States patent office had issued 1,500,000 patent certificates, and the total number of new patents granted each year is over 40,000. Of all patents that have been issued, it is probable that not more than a fraction of one per cent have ever possessed any financial value. The most worth-while inventions have been the result of long years of development and are usually covered by a large number of patents. In fact, it very rarely happens that the original inventor gains any fortune from the exploitation of his patent.[1] Further, if a patent really turns out to be worth anything there is always the possibility that some stronger company will bring

[1] Of course it occasionally happens that a single patent is of great value. For example, a few years ago the Standard Oil Company is reported to have won a suit in a patent case against the Texas Company, whereby the various affiliated companies would save royalties during the life of the patent to an amount estimated at $34,000,000. The patent covered an invention for the decarbonization of petroleum which permits the extraction of gasoline from crude oil (1922).

suit for infringement, or in lieu of that, may infringe the patent and make necessary legal action on the part of the struggling concern. In either case, the patent is likely to be in the beginning more of a liability than an asset.

It has sometimes been urged that "secret processes" are a more important financial asset than patents, since the knowledge of them may be closely held by the company which has developed them. Some concerns, therefore, refrain from taking out patents on their inventions or discoveries, on the assumption that once the patent has been issued it in a sense becomes public property. When a process is of such a sort that it can with reasonable assurance be kept secret from competitors, the exploiting company may have a very distinct financial advantage. On the other hand, without registration, the concern can have no legal right of action if others discover and utilize the same process. It has sometimes been asserted, therefore, that patents have a "scarecrow" value.

A *trade-mark* may have a more definite value, since it can be used directly for advertising purposes. Further, the laws operate more effectively to protect trade-marks than patents. The ownership of a trade-mark is, upon proper registration, practically perpetual, while the life of a patent is distinctly limited to only 17 years unless the original patent can be controlled by additional patents.[1]

GOOD-WILL AS AN ASSET

Another very important intangible asset which is really met with only in established concerns is *good-will*. For purposes of general discussion good-will may be defined as the excess earning power enjoyed by a business over and above that met with in similar enterprises as a result of the friendly and profitable relations existing between the business and the buying public. This advantageous relationship may be due to wholly personal factors in the management, to long usage, to advertising, to

[1] The total number of trade-marks registered by the United States Patent Office until the end of 1921 was only 138,556, or about one-tenth of the number of patents issued. Also the annual number of trade-marks registered was rarely in excess of 5,000 or 6,000, until recent years when a figure of 14,000 to 15,000 has been reached.

particularly satisfactory service rendered, or may result from other causes or combinations of causes, including favorable location, tradition, and the like.

There are occasionally times when even a new business may, because of the peculiar qualities and past experience of one or more of its officers, begin operations with a fair amount of good-will. It sometimes happens also that one small local concern supersedes another without acquiring any of the assets of the preceding concern except its good-will, which may be transferred with a former officer of the earlier company and may even be paid for. In all such cases, however, good-will depends so directly on the personal equation that it is very problematical indeed, and there is little certainty that it will continue under the changed conditions of management.

Good-will, therefore, can best be measured and is only of real significance in matters of capitalization (*a*) when an already established concern changes hands through selling or merger, and (*b*) when an old business changes its form of organization or is recapitalized. That type of good-will which is largely dependent on one individual who has developed pleasant relations with the public, is frequently of great temporary value, but is so lacking in permanence or dependability that it scarcely deserves to be reckoned with for purposes of capitalization. When the good-will is due to a complexity of conditions dependent upon the business as a whole, it presents a much more definite element in value. Yet, at best, it should constantly be borne in mind that this asset is, of all intangible assets probably the most *intangible,* since it is least subject to fixed rules, and conditions governing it are always changing. There is really little if any assurance that a change of ownership or organization will make possible the continuance of that good-will which at the time of change is sometimes given a very high value in connection with the issue of stock.

In view of these considerations, the conservative financier would normally capitalize good-will at a very low figure, perhaps at "five years' purchase price," that is, the excess annual net income over a fair return on the investment in such a business might be capitalized on a 20 per cent basis. Even then,

sound financial policy would require that this intangible item be amortized ("written off") out of the earnings as rapidly as possible.

Finally, it is significant to note that, as a rule, the only type of business which can be at all sure of its good-will is the *retail* business, since the personal element here plays a very important part. Some chain stores and department stores, for example, in changing their form of ownership from partnership to corporation have issued common stock in such an amount as to cover the assumed value of their good-will, while all of their tangible assets have been covered by preferred stock. Outstanding examples of such capitalization of good-will are afforded by the F. W. Woolworth Company and by Sears, Roebuck & Company. The former capitalized good-will at $50,000,000, an amount more than three times its tangible assets, while the latter estimated this intangible at $30,000,000 in common stock. In the case of the Woolworth Company, later history seems fully to have justified this high capitalization. It is more difficult to understand why the B. F. Goodrich Company was induced to capitalize its good-will at approximately $60,000,000. Many other companies, in readjusting their capital accounts, or in combining with others, have covered their tangible assets by preferred stock, and have capitalized intangibles to an even greater amount.[1]

OVER-CAPITALIZATION

With the foregoing considerations in mind, it is desirable to examine briefly the "pros" and "cons" of *over-capitalization*. This term, for present purposes, means simply that the outstanding securities (for a new concern these will usually be limited to the different classes of stock) have a nominal value substantially greater than is warranted by the valuable assets or the probable or demonstrated earning power of the business. No definite lines can be drawn, since "over-capitalization" is a purely relative matter. In general, however, a company may be thought of as "over-capitalized," when its security issues are

[1] See the following chapter for further discussion of this subject.

so large that no reasonable dividend can be paid on the common stock over a period of years.

Over-capitalization may arise in many ways, some of which are the following:

(*a*) As a result of the actual loss or destruction of valuable assets;

(*b*) As a result of the depreciation of tangible assets due to insufficient maintenance;

(*c*) As a result of too great optimism on the part of the promoters which has led them to overestimate the probable future earnings;

(*d*) It may be due to the methods of promotion used, which have made necessary a liberal distribution of stock, or which have used up too large a proportion of the money received for selling expenses;

(*e*) The over-capitalization may be purely the result of fraudulent transactions.

Under these circumstances, therefore, it seems rather futile to attempt to lay down any general suggestions regarding the significance of "over-capitalization." There are, of course, a number of definite forces tending to encourage a high capitalization of industrial enterprises, even for concerns which are not purely speculative in their purpose.

1. In the first place, as has already been hinted, it is a natural and human trait to wish to talk in "big figures." It is perhaps a particularly pronounced trait of many an American business man. He likes to think of himself as the owner or important officer, or it may be only the employee, of a concern whose capital is measured in large terms.

2. Again, in recent years the federal income tax law has probably encouraged over-capitalization, inasmuch as it is rather difficult to persuade the tax collector that the "invested capital" of a business is greater than the paid-in value of the outstanding stock. It has, therefore, been felt to be a safer procedure to issue stock liberally on some pretext or other, and then to endeavor to persuade the federal authorities that

the "capital invested" is proportionately large so that the basis on which excess profits are estimated shall be sufficiently large to reduce the taxes paid.

3. Finally, of course, the ease with which corporations are formed and the lack of definite or uniform restrictions as to the nature of their capitalization and the disposition of their stock, has beyond a doubt fostered "over-capitalization."

On the other hand, there are a number of definite influences which tend to keep the capitalization within more reasonable bounds.

1. Some states have passed laws regulating the amount of money or its equivalent which shall be paid in on shares issued. This provision alone has, in many instances, made it difficult for certain types of concerns recklessly to enlarge their stock issues.

2. Because of the incorporation fees and annual franchise taxes, the amount of stock may be limited. In some states, at the time of incorporation a fee of 20 or 25 cents per $1,000 capital is imposed, with an annual franchise tax thereafter of $1 per $1,000 of capitalization up to a certain point.

3. The expense of providing properly printed and engraved certificates of stock is by no means a negligible item.

It is scarcely necessary after what has been already said to point out any particular evils of over-capitalization. A few suggestions, however, may be in order at this point.

1. Excessive capitalization in itself may tend to lead to extravagance in the operation of the new corporation.

2. Too great capitalization may make the dividend payments ridiculously low or may altogether prevent the payment of dividends.

3. The public may frequently be deceived by the excessive amount of stock outstanding and the low dividend payments which conceal the actual earnings.

4. There is no question that the credit of a concern whose capitalization is extreme is open to serious question by the banks and the mercantile community.

5. Over-capitalization increases local taxes not only directly but probably indirectly.

6. Finally, it is doubtless true that an excessive issue of shares stimulates that sort of stock speculation which is productive of harmful results.

UNDER-CAPITALIZATION

It may not be amiss to call attention to the fact that there is also such a thing as *under-capitalization,* as the term is occasionally used. That is, a corporation may have issued an amount of stock, the nominal value of which is very much lower than the fair value of the company's assets, and is extremely small when compared with the demonstrated earning power of the business. This condition may result from the building up of a business over a long period of time wholly out of surplus earnings, or it may be that even a new concern which has excellent earning prospects has put an ultra-conservative estimate on its future possibilities. From a strictly financial point of view such under-capitalization is usually most praiseworthy, though it may occasionally lead to certain disadvantages.

1. The very fact that the "capital" of a new concern is ultra-conservative may unfortunately cause it to be rated unfairly by those with whom it is dealing in a business way at the inception of its career. This is probably due to the human tendency to put even a lower value on the other fellow than he puts on himself. Too great modesty is not always a virtue in business, though in the long run it is always the desirable policy.

2. When a concern is capitalized at an unduly low figure, its profits, if the business is successful, will naturally appear extremely high when compared with the outstanding stock. Consequently, when apparently abnormally high dividends are paid, public attention may be centered on the company in such a manner as to lead either (*a*) to an increase of competition in the field, or (*b*) to public investigation or express disapproval.[1] When such a concern is a closed corporation or purely a family

[1] See footnote on opposite page.

affair, it really makes little difference unless the state laws require full returns of the financial condition.

3. The company with a markedly low capitalization might find itself at a decided disadvantage in negotiating the payment of excess profits taxes. Since these taxes were levied on the basis of "invested capital," it was most difficult to convince the authorities that this "investment" was greater than the paid-in value of the stock.[2]

It is interesting to note that unless intangibles are very heavily capitalized, the average trading company, having a low proportion of fixed assets, will ordinarily be capitalized at a figure which is small relative to its annual gross income. On the other hand, a company in which the fixed investment is relatively high, as in many types of manufacturing companies, will normally show a capitalization almost equal to its gross income or even much greater than this amount. Actual capital invested in trading companies, from the very nature of their business, is turned over rapidly, frequently many times in the course of a year, while the average manufacturing business rarely turns its investment more than about once per year. For *all* manufacturing enterprises the rate was 112 per cent in 1909, and about 140 per cent in 1919. In the absence of public regulation, however, there is apparently a natural tendency for most types of industrial concerns to increase their capitalization until it bears a fairly close relation to the annual gross income.

To conclude this question of "capitalization," it may be said that conservatism is always the safest policy to follow in the matter, particularly for the beginning business. Such a policy will lead to more confidence, and hence to better credit, and

[1] In this connection one may recall the tremendous public *furore* which was created when ex-Secretary McAdoo stated that to his knowledge certain independent coal companies had during the War period earned profits as high as 2,000 per cent on their capital stock. Obviously, in these cases the stock had been issued for a merely nominal amount. However, the difficulty might not have arisen had the companies not been "under-capitalized."

[2] For the Government's most recent general ruling regarding "invested capital" the reader is referred to the footnote at the beginning of Chapter V.

will enable the concern to avoid many pitfalls. Generally speaking, in an old concern earnings no doubt constitute the most satisfactory basis for capitalization. Beyond this, little more can be said. The number of shares issued will naturally depend primarily upon (*a*) the amount of funds needed, (*b*) the class of purchasers approached, (*c*) the inducements which must be given in order to influence these "investors" in a financial way, and (*d*) upon the method of selling the securities.

B. What Type of Securities Shall Be Issued?

The next question to be raised is "What shall be the type of capitalization of the new concern?" What kind of securities shall be issued; on what basis shall they be sold; what shall be the par value of stock?

For a new concern these questions can be very speedily disposed of. While it is true that some people would advocate the issuing of preferred stock or even of bonds by a newly launched enterprise, the practise is most objectionable, even when possible. The discussion here, of course, applies to those concerns which are *actually* new and which have not merely succeeded already established enterprises which have been taken over; nor are public service corporations considered. As has been repeatedly stated, any new business, no matter how conservative its management or how stable the industry, is inevitably more or less of a speculation. Under such circumstances it is a most unwise policy to burden the business with interest charges, or to enlist the financial assistance of "investors" through preferred stock issues. No wholly new industrial company has a right to assume that it can with impunity "trade on its equity." The stockholders may actually have paid in a definite amount of money, but until their investment has demonstrated the capacity to earn a fair return over a period of time, there is really no "equity" to trade on. The assets of an industrial enterprise may be practically valueless if earnings cannot be realized, and "hope" or "prophecy" are no satisfactory assets for the investor to lend upon.

To be sure, many a new company tries to raise practically all of the money needed by selling preferred stock. The promoters of the concern in the meantime endeavor to maintain their control by keeping the common stock in their own hands, though they may perhaps give a minority of this common stock as a bonus to encourage the purchase of preferred stock. It should be sufficiently evident, however, that if the "owner" of a new enterprise has no funds of his own to invest, or for reasons best known to himself refrains from investing them, any man would be a fool to think that he is securing an "investment" interest by buying preferred stock. All such an "investor" does is voluntarily to hold up his hands and invite someone to rob him. Yet a large number of new concerns are launched in just this way. Some even go so far as to put out bonds, frequently debentures and occasionally mortgages. The fact that it may be perfectly safe for a public service corporation to finance itself on this principle has tended to blind students of finance to the actual situation in the case of industrial concerns. Given reasonable intelligence in the launching of a public service enterprise, it is possible pretty definitely to estimate what the earnings will be and the amount of fixed charges which can be carried. On the other hand, it is utterly impossible to be even reasonably sure of the financial outcome of the average industrial enterprise. There are, of course, a few exceptions, particularly when a beginning concern can start with a valuable contract which will assure a certain minimum of earnings over a considerable period of time. There are also occasions when it is perfectly safe in a private way to enlist the investment interest of close friends of the company through the issue of some form of senior obligation. But to lay it down as a general rule that it is "cheaper" for a beginning concern to use borrowed money or to put out as much preferred stock as possible with a view to securing higher dividends for the common stock, is utterly misleading. Even if the statement were true, the policy would be too risky to be advisable. Enough dangers are encountered in the financial game without the conscious attempt to invite other dangers. From the investor's point of view also, it should generally be remembered that the

mere name of a security does not give it strength. The only basis on which senior obligations can be properly issued is, as already stated, the basis of demonstrated earning power. However, as long as some people will assiduously earn money and laboriously save it, and will then give the use of it to anyone who promises more than a savings bank interest rate, just so long will attempts be made to separate the "investment interest" of a new business from the actual "control."

The excuse offered by many a budding capitalist for attempting to sell preferred stock in his project, is his desire as an "inventor" or "originator" to keep control of his business. He does not have sufficient money of his own to provide for the original outlays, yet he does not wish to share the control with others. Hence, he naturally resorts to the easy method of issuing preferred stock. He can, of course, pay himself for his patents or work as a promoter by taking a certain block of common stock and then arranging the stock-selling program so that he will receive a share of common for every share sold. This arrangement, however, would greatly discourage other common stockholders, even though no legal difficulties were encountered, and of course it would "dilute" profits accruing to the common stock.

It is wholly unnecessary for our purposes to go farther into this matter. Suffice it to say that large numbers of perfectly well meaning little fellows in an attempt to launch their new companies, have been confronted by this very problem. In the numerous cases which have come under the writer's personal observation, it has usually been perfectly evident that the reason why the beginner was having difficulty in raising sufficient capital, was because he himself was not a suitable person to head the business, even though the proposition in itself might have been a good one. Yet almost invariably such persons are determined to keep control, and think that the public should be willing to take senior securities at their face value.

There are cases when, after a long process of development and experiment by independent interests, a new and large company may be promoted and launched by powerful financial

interests. In such cases, the reputation of the controlling companies and their record of past performance may be sufficient to warrant the issue of preferred stock. Such instances, however, are rare, and even then the stock is largely of a speculative nature. An interesting recent example of such a case is afforded by the Radio Corporation of America, organized in 1919 after 20 years of experiment and development and sponsored by the General Electric Company and the American Telephone and Telegraph Company. The common stock was closely held by two or three powerful organizations, and even then the 7 per cent dividend on the preferred stock was not made cumulative until after 1923. Such subsidiary corporations, however, are on an entirely different basis from the sort of enterprise with which one ordinarily has to deal.

A new company will, if the law permits, usually fix the par value of its stock at a figure which will appeal to the type of buyer who is to be approached. The question is not really a very vital one for the average sized, conservative industrial corporation. For the speculative enterprise, the par value is made very low, so that small amounts of money can be collected from a very large number of stockholders or "suckers." Stock having no par value is now being "affected" by such concerns. If preferred stock is being sold, it is usually found more desirable to give common stock along with the preferred as a bonus, than to sell the latter at a discount. It creates an unfavorable impression to have on the asset side of the balance sheet a large item of preferred stock discount. Further, by a fiction of the imagination, it is more satisfactory to feel that the company, even in its initial stages, can raise capital at the current rate by offering the inducement of probably worthless common shares, than to be confronted with the necessity of admitting that its credit is not equal to the average, inasmuch as "investors" do not have sufficient confidence to accept the preferred stock at its face value. Occasionally, also, there are laws which prevent the issue of preferred stock at a discount. Such laws, however, no not ordinarily apply to the stock of industrial corporations.

C. How Shall the Securities Be Marketed?

The third question of importance in this chapter, "To whom shall the securities be sold in order to raise the desired funds?" has already been anticipated in a number of places. The answer to this question will vary, depending upon a number of considerations, such as (*a*) the type of industry, (*b*) the amount of capital to be raised, (*c*) the local investment situation, (*d*) the general business situation, and (*e*) the purpose of the promoters of the business.

Obviously, the new corporation may in theory have a somewhat wider market for "capital," in the popular sense, than the unorganized business, because of the transferability and small denomination of its shares. In practise, however, many a corporation is in reality "owned" by the same people who would have owned it had it remained a partnership or an individual enterprise. The sources from which funds may be expected, therefore, vary from company to company in accordance with the above considerations, and may generally be listed as follows:

1. The relatives and friends of those who organize the company;

2. The people residing in the locality where the business is to be operated;

3. People in other localities who are customarily reached by means of (*a*) newspaper advertising, (*b*) special letters sent through the mails, and (*c*) personal interviews of salesmen;

4. Sometimes stock may be sold to people from whom it is proposed to purchase goods and who are willing to help out the struggling concern in this way; or possibly the prospective customers of the business may be induced to take some shares.

5. Occasionally, though very rarely, it happens that an entirely new concern may raise money by selling its securities through brokers. No creditable "investment banker," however, would endanger his reputation by attempting to "float" a new issue of this sort.

After what has been said in the preceding chapter, attention

need be given in this place to only two or three of these different sources of funds. Perhaps the appeal which is most commonly made outside the immediate circle of close friends, is to the people in the locality where a business is to be operated. This appeal is frequently made with deadly effectiveness by strangers who propose to launch an enterprise which will bring sure prosperity to the community through an increase of property values and a stimulation of general business activity. "If I can *see* my investment at work, everything must be all right," reasons the average man.

Hundreds of millions of dollars have thus been raised for "investment" in wholly unwarranted enterprises, even though no direct fraud has entered into the transaction. It is really pitiful to note the number of modest, hard-earned fortunes which in the years 1919 and 1920 were thrown away on rubber tire companies launched in this manner in some of the middle western states. At one time it is a rubber tire company, at another time an automobile company, or an oil company. Any type of business in which the profits have been above the average will in all probability have a host of imitators, who attempt to secure capital by appealing to the cupidity and the local interest of the investor. Frequently a most praiseworthy enterprise launched by a native of the locality would at the same time go begging. Needless to say, the argument from analogy in cases of this sort is as misleading as could be imagined. Such "evidence" is utterly worthless from the investment point of view. This, however, is a well-known, thoroughly seasoned, perennially effective method of raising funds, which will probably be used for weal or woe as long as new enterprises continue to be launched.

There are often very good reasons why a new business cannot market its securities in the place where operations are to be carried on. This may be due to the fact that people in the locality are not interested in that particular type of business, or because there is a lack of money for investment purposes. Further, distance frequently "lends enchantment to the view" in these matters. Hence, an appeal may be made generally or more specifically to people in other communities. This, of

course, is the well-known method of getting funds for wholly speculative enterprises and fraudulent schemes. Yet it should not be supposed that every concern which attempts to finance in this way is necessarily promoted for dishonest purposes.

In the launching of concerns of a highly speculative type, whether by the methods above mentioned or through the intervention of "brokers" who deal in low-grade securities, there is usually much advertising and personal solicitation. This advertising may be of a perfectly dignified sort which will enlist the interest of possible investors to such an extent that they will communicate with the company issuing the stock. It would be difficult to say how much stock is sold in this way. However, the fact that notices of such "investment opportunities" are constantly appearing in the daily newspapers would lead to the conclusion that this advertising, expensive though it is, must bring returns sufficient to justify the expenditure.

When the appeal is made by letter, sometimes a carefully selected list is chosen and at other times there seems to have been no plan whatever followed. In spite of postal regulation and blue sky laws, an astounding volume of "literature" put out by wholly fraudulent concerns continues to find its way through the mails and to make such a forceful appeal that small savers throw away probably more than $200,000,000 a year as a result of such "mail order" methods.[1]

[1] Literally thousands of instances might be given of the various methods followed by swindling concerns which make use of the mails. The writer recalls the case of one man who extracted large quantities of money from small tradesmen in an eastern city to invest in a new oil well. The company actually had a well, and dividends were paid for a short time until the concern gracefully failed. As soon as this company failed, the promoter again approached the original investors and induced many of them to put money into a new company the purpose of which was to "save the assets" of the old company. Finally, the promoter himself, a well-known man in a large western city, failed, with doubtful assets of a few thousand dollars and liabilities in excess of $1,000,000. Thereupon, he sent letters to his former clients, explaining that his failure was the result of dishonesty of others as well as of their envy and the injustice of the courts. He further stated that he was now forming a new company to be conducted along the same sound business lines for which he was already known, the purpose of which would be to insure investors against the losses resulting from the operation of swindling concerns! He then gave an opportunity for the twice-bled victims to subscribe to the shares of this concern—now organized as a voluntary association—and because of the praise-

The new, honestly promoted concern rarely employs the services of paid salesmen. Rather, some of the officers either directly, or through their friends, endeavor to sell stock by personal conferences. The stock salesman for actually new industrial enterprises would be a very expensive luxury. Their

worthy motive behind the project, some of them again sent money to the promoter.

The following is an example of the sort of appeal that is frequently made, obviously with a good deal of effect:

"GROUND FLOOR SYNDICATE SUBSCRIPTION BOOKS NOW CLOSE."

FROM THE OFFICE OF W. C. G.

———, Texas, Dec. 28, 1921.

Dear Friend:

The time has come when the books of this Syndicate or "Ground Floor Crowd" are to be closed, and if you have not already sent in your check or if you do not send in your check by early mail, it will be too late, and you will have let this opportunity slip through your fingers.

A meeting is to be called at an early date for the company to be organized and officers and Directors elected, after which it will be too late to get in on the ground floor. Stock will then cost you *ten times* what it will now.

In coming in as one of the organizers, you are associating yourself with a company that you know will be operated right, and in which everybody will get a square deal, because you will not only be one of the organizers, but you can be one of the Directors, if you want to be.

On account of your familiarity with different oil companies, and on account of the treatment which you have received at the hands of different oil companies, your experience and judgment should be of material benefit to the success of this company, and I want you to accept a place as one of its Directors. You could then assist in directing its affairs; you would know everything was being carried on fair, square, open, and above board, and that everyone connected with it, was getting a square deal. "You can have the satisfaction of knowing that there was at least one oil company which was operated fairly, and in which everybody got a square deal."

I appreciate the fact that you might not be able to attend all the Directors' meetings, but some of the other Directors also live out of Fort Worth and as all matters of importance will be submitted by mail you could write your opinion and vote by mail. You will also receive the regular drilling reports.

Anyone of your earning capacity and ability is amply able to invest $100.00, and you should do it. This is doubtless the first opportunity you ever had to get in on the ground floor, and it goes without saying, that this is your first opportunity to make the nice profit to which you are entitled, and have long looked forward to, and you should by all means avail yourself of the opportunity to its fullest extent.

In time past you have always waited until the other fellow had organized the company and had made the promotion profit himself. You would wait until he advertised his stock for sale to the public, then you would buy and pay par value or more for the stock.

By getting in on this ground floor syndicate you make the promotion or organization profit of ten for one for yourself.

(Footnote continued on next page.)

services are usually utilized most widely by very speculative or fraudulent undertakings in which a large proportion of the money realized from the sale of stock is paid in commissions. These "salesmen" and the "brokers" with whom they work or whom they represent, make very free use of the telephone and even send telegrams to supplement personal interviews, thus frequently influencing their innocent victims and harvesting many ill-gotten gains.

Attention, however, must not be unduly centered upon the wholly speculative new concern of which the oil business is most typical—and this is not to be wondered at when one realizes that the total authorized capital stock issues of new oil and gas companies in the three-year period 1919-1921, amounted to $7,876,396,800. There are perfectly conservative methods of raising capital for a new and thoroughly reliable business. Such an industrial company, however, must ordinarily make a local appeal and the number of its stockholders will almost invariably be small. Wide distribution of

As one of the organizers, $100.00 gets for you 1,000 shares, whereas after the company is organized, it will take $1,000.00 to get 1,000 shares. This will get you a quick profit of ten for one. After the company is organized, and the advertising campaign started, a contract is to be made with two brokers; one to organize a sales force to sell stock to raise money with which to drill a well; the other to organize a sales force to sell the stock belonging to the organizers or ground floor men, and his efforts together with the efforts of the organizers or ground floor men themselves, should in a short time enable each ground floor man to get his money back. Then if you wanted to sell more stock and make $7.00 or $8.00 on each $1.00 invested, you could do so, or if you wanted to ride the balance through until the well was completed, if it should be a gusher, it would make you an independent fortune.

I am reserving a place for you for $100.00 until you have time to get this letter and give the matter consideration and get your check to me, or until you can sign and get the enclosed note to me. However, if you cannot invest that much, you may send your check or note for a smaller amount. You understand the stock will not be delivered to you until the note is paid in full.

Very truly yours,

W. C. G.

I NOW BID GOODBYE TO YOU if you are not joining with me on this ground floor plan. If you do come in, then we will get better acquainted as time goes by.

P. S.—Remember, that if you fail to avail yourself of this opportunity, by early mail, that it now slips through your fingers forever, as the books of the "ground floor syndicate" are to be closed immediately, so it will take quick action on your part.

securities in the beginning is probably more of a drawback than an advantage, since it is well not to have too many people watching initial mistakes in management. The new enterprise which wishes to get a "wide distribution" of its shares, normally arranges matters so that these shareholders will be far removed from the scene of operations.

There are splendid opportunities for raising capital to finance a new corporation which really deserves to be launched. Some of these will be further mentioned in the following chapters, but the best rule for the novice to bear in mind is that new stock issuing concerns should with few exceptions do their financing *privately* and not publicly. The man who seriously puts his money into such enterprises should in turn remember that he cannot, by any subterfuge, avoid the risks of ownership.

CHAPTER IX

RAISING NEW PERMANENT CAPITAL FOR ESTABLISHED CONCERNS[1]

"Growing pains"—A. The conditions under which an old concern needs new financing—Desirability of cautious expansion—Securing long time capital for working purposes—Changing the nature of already existing obligations—Refunding operations—Financing changes in ownership—B. In what form shall the new capital be supplied?—Importance of reinvested earnings—The sale of additional stock—"Trading on the equity"—Anomalous features of preferred stock issues—Relative importance of preferred stock in industrial capitalization—Raising capital by long time borrowing—Undesirability of creating funded obligations—The New England method of financing—Danger of short time loans—The long time interest rate and factors which affect it—Prevailing forms of industrial capitalization—Illustrative statistics—C. The sources of new capital—Selling stock by the company—Privileged subscriptions and rights—Possible disadvantages of selling stock by the company.

WHEN the original financing has been sound, a business has little to fear for the future, provided it is guided by a competent management. Many concerns attain their full financial size almost at the time of launching. While their business may grow and expand in different directions, they may never actually need much additional capital in order to enable them to hold their position in the industrial world. The law of growth in business does not necessarily call for increased investment, in spite of common opinion to the contrary. More effective use of an already existing investment may be quite sufficient to enable increasingly satisfactory profits to be made. There is not, in many instances, any relation whatever between the size of the capital investment and the net income of a business. In fact, as will be shown in more detail in a later chapter,[2] there seems to be a distinct tendency toward diminishing returns as the size of the investment is increased.

[1] Those unfamiliar with accounting terminology may profitably read Chapters XIII and XIV at this point.

[2] See Chapter XXI.

An inspection of the figures given in Table 3[1] shows a progressive decrease in the percentage of net income to invested capital as the amount of invested capital increases up to about $60,000. After this point, some irregularity is evident, but the general tendency still appears to be downward. It is unnecessary to discuss the further significance of these figures at this point, but the reader will do well to remember that beyond a doubt the highest relative returns in many lines of industry are reaped by the more efficiently managed small concern, whose "capital" is rarely if ever increased. The problem of new financing for such businesses, therefore, is never a pressing one. When they do expand, if at all, the process is a very gradual one, and gives rise to no particularly difficult problems. Probably the majority of business enterprises are in this class.

There are, however, many concerns in various lines of business, which must more or less constantly expand up to a certain point, in order to insure their existence in the competitive field. Apparently their investment must from time to time be increased if they wish to avoid retrogression. Yet the most careful investigation should be made in order to determine whether a concern really needs new capital. The mere acquisition of an increased investment will by no means assure increased returns—it may even wreck the business. Therefore, it is well to distinguish between what a business *needs,* in the financial sense, and what its management "wants."

Most every one "wants" the earth; that is a fundamental trait of human nature, and is the mainspring of industrial progress. Yet, many a business which thinks it "needs" additional financing, is merely suffering from a common case of "swelled head," or from the ills of inefficient management, or something of the sort. Many a business man is carried away by the mere lure of bigness. He wishes to build greater, and expand in a more spectacular way, just because, quite unconsciously, he wishes to create an impression that he is superior to his rivals in the field. Again, it may be that, with the best intentions in the world, the managers are simply carried away by a spirit of more or less pardonable optimism which convinces them that

[1]See page 24.

they can "get all the business there is," if only enough capital can be raised. The financial highways are strewn with the wrecks of such roseate hopes. Regarding this phase of the situation more will be said in a moment.

Granting that a concern is really in need of new financing, the more essential problems connected with a discussion of the situation are probably covered by the following questions:

A. Under what conditions does an old concern need new financing?

B. By what method, or in what form, shall the new capital be supplied?

C. From what sources shall the capital be secured?

A. Under What Conditions Does an Old Concern Need New Financing?

It would be very difficult indeed to catalog all the circumstances and combinations of circumstances under which new financing is desirable or expedient. Perhaps, however, a brief notation of the more common conditions surrounding the attempt to raise further capital will be helpful to the reader. Generally, therefore, it may be stated that a business may require new financing for the following reasons or purposes:

1. To expand an old business along the old lines;

2. To expand an old business in some new direction;

3. To buy out other concerns or to combine with them (frequently closely related to the above);

4. To provide temporary or "working" capital;

5. To change the type or term of already existing capital liabilities;

6. To refund or provide the means of payment for maturing security issues;

7. To change the ownership or form of organization, or to enable present owners to withdraw their capital;

8. To adjust conflicting ownership and creditor interests in cases of reorganization.

The first three conditions under which new capital may be raised are closely related. Perhaps a brief examination of these reasons may profitably be made by raising such questions as the following:

(*a*) Will it pay to expand the business? (*b*) How fast should the business grow? (*c*) Is it probable that the old management will be able to direct the increased business? (*d*) When should the expansion be made?

The first question has already been touched upon, and will be more extensively developed in the chapter on "The Financial Results of Size." Suffice it to say that in the majority of cases it decidedly does not pay in dollars and cents to raise new capital merely for the sake of expansion. No disappointments are keener than those ultimately undergone by a hitherto prosperous small business man who, picturing himself as the head of a large enterprise, has increased the investment in his fixed assets, only to find when too late that he has expanded at the wrong time in the business cycle, or has overestimated his market. Capital once invested in an industrial enterprise is usually there to stay, and interest, dividends or personal salaries cannot be paid by bricks and mortar. To increase the fixed investment in order to secure a greater share of *temporary* business, as many did in 1919-1920, is suicidal.

When the expansion is in some new direction, the future may be even more uncertain. Outlays made by an old concern in order to develop a hitherto untried field of activity, may be fully as speculative in their nature as if an entirely new enterprise were being launched. Accordingly, proposed new financing for such purposes should be most carefully weighed.

Granting that, as nearly as can be ascertained, there is some justification for expanding a business, it is very pertinent to ask, How rapidly should that expansion be made? How fast should the business grow?

Here, again, no categorical answers can be given; much depends upon the type of business, and the general business conditions, as well as upon the management itself. Some concerns are ultra-conservative to such an extent that they have failed to expand at a time when it would have been extremely advan-

tageous for them to do so. As a result, competitors in the field may have gained an advantage over them. It may at times be very safe and highly advantageous to expand by buying out a competing business. However, there is little question that the average business which grows at all is in danger of attempting to grow too rapidly. Such growth ordinarily leads to a lack of balance in different parts of the organization, which maladjustment makes for weakness. There is a tendency to become top-heavy, or to have energies diverted from the main path. The concern which grows at the proper speed, is usually almost unconscious of its growth.

Almost without exception, the really strong industrial enterprises of the present were launched many years ago, and for a long period of time were little known in the financial world. They grew from within and not from without. If it was necessary for them to secure additional funds, they waited until their reinvested earnings were sufficient to permit development along the desired lines. In periods of depression they were untroubled by creditors and heavy interest payments. The history of such concerns as the Dennison Manufacturing Company or the Eastman Kodak Company furnishes very instructive evidence along these lines. Many of those concerns which "grow" rapidly, emphasize mere bigness as a criterion of success. While their size increases, their *strength* is undermined. There are too many examples of companies which have attained their large *volume* of business by selling at a loss. While a categorical answer cannot be given to the question raised, this negative advice is perhaps worthy of careful consideration,—*A business will probably not grow too rapidly which depends for its growth upon re-invested earnings.*

In considering this problem of expansion, the human side of the question is of vast significance. It may be that, from the merely material and physical point of view, the expansion appears to be financially justified. The quality of the management itself, however, may make unwise or even dangerous the carrying out of a policy which otherwise might prove successful. There is a distinct limit to the capacity of the average business man, a limit which in itself decides that the average

business shall be small. For some men of this sort, increasing size acts as a stimulant which causes them to forget the day of small things and the caution of earlier years, so that their heads are turned by the mere idea of bigness.

More frequently many concerns grow large in size, while their officers fail to grow up with them. They continue to think and to act in small terms, when their business demands unusual scope and vision, which can be attained only by profound study of the situation, combined with great natural capacity. To attain real success, the growth of a business must be coordinated in all its parts. "Capital" is much easier to secure than adequate management. No doubt many a man whose business has grown too big for him, looks back with regret to the earlier years of struggle accompanied by conscious achievement, when he was master of the business and not mastered by it. It requires almost more than eternal vigilance to guide a large concern through the business shoals, and usually only one hand can hold the rudder

In the rising tide of prosperity, it is comparatively easy for a small man to find himself in a position too big for him. The mere momentum of expansion pushes him along to a position for which he is not fitted, or greatly increases the scope of the position which he has previously held. Many men, given a reasonable opportunity, are able to "grow" into their enlarged positions. In more numerous instances, however, this growth, if possible at all, requires a long period of incubation.

No phase of the Business Cycle is more compelling in its interest than this. Perhaps no period in all industrial history has furnished a larger number of outstanding examples of men who, having been heralded as leaders of business, and whose reputation was made during a period of rapidly rising prices, yet have been cast aside as wholly unable to cope with the problems of the period of grave depression. Many a man, disporting himself in the waves of the incoming tide as a veritable financial leviathan, and frequently so regarded by others, has found himself left on the beach, shrunken to a minnow's size.

Even though the foregoing questions could all be answered in a satisfactory manner, it might yet be unwise to attempt

to finance an expansion, because of the generally unfavorable business situation. Practically the same considerations apply in this connection as in the case of a newly launched enterprise. The proper time must be selected so that new investment can be made on an effective basis. The most successful concerns have planned their expansion in such a way as to build new construction when prices are comparatively low and business is dull. They have refrained from expansion at times when business is very active and prices are high. They have been content to be somewhat cramped for facilities at such times, and have been willing, if necessary, to forego some of the business which they might have secured. Thus they have kept their investment working for them with great effectiveness at all times, and through their careful planning and rational pessimism have avoided the mistakes which the average business almost invariably makes.

It is the tendency always to launch upon a program of new construction and expansion at those times when volume of business is greatest, and the excitement is keenest. This was the situation in 1919 and early in 1920, and has almost invariably been the policy followed at the "peak" of prosperity. However, a careful study of the available data shows beyond a doubt that practically every concern which increased its fixed investment after 1917, later found itself in serious financial difficulties. The *time* of expansion, therefore, must be watched more carefully than any other factor in the situation. Such wisely managed enterprises as the Amoskeag Manufacturing Company, for example, have found the chief source of their strength to be the proper timing of their new construction and replacements.

The primary purposes for which *really* new permanent capital is needed by an established concern have already been indicated. In most of the other cases listed, though the capital may be raised by so-called "permanent" instruments of finance, the need is sometimes relatively temporary. More commonly, the "new capital" is merely used to take the place of other capital, through the transfer of ownership, or the re-adjust-

ment of capitalization. Recently, many concerns have been compelled to do new financing in order to supply themselves with "adequate working capital." In fact, one of the commonest purposes for the issue of new securities during the past two years, has been stated by the bankers to be "the provision of additional working capital." Some of the chief reasons why various companies are forced to raise working capital by means of new security issues are the following:

1. The business may have expanded so rapidly that the original "permanent working capital" has proved inadequate.

2. There may have been an expansion of the fixed assets through temporary borrowing, and consequent dilution of working assets.

3. Working capital is also needed because of the "frozen" condition of current assets, receivables, and inventories, which are normally supposed to be perfectly liquid.

4. A sudden shrinkage in inventory values may have seriously impaired the "current ratio."

5. The company may have suffered losses in operation due to the drop in sales, to such an extent that it is necessary to borrow in order to meet current expenses.

6. In many cases, so-called "new working capital" is needed in order to enable the concern merely to shift the *form* of its obligations, and to convert its bank loans into more permanent securities.

At this point little comment need to be made upon these reasons for raising new capital. The underlying situation will be more thoroughly discussed in connection with bank loans and the causes of financial involvements and failures. This much, however, should be said: most of the demands for new *working capital* financed through the issue of securities are not the result of any normal or rational expansion. On the contrary, they are the result either (*a*) of reckless expansion, or (*b*) of a drop in prices following a period of inflation. In either case, proper planning and reasonable conservatism might have gone far to prevent this resort to new financing.

Many a concern, when business was very prosperous and interest rates were high, attempted to pay for new construction by means of bank loans, and by using up too large a proportion of its cash on hand. It was hoped that interest rates would drop and that permanent securities might then be issued on a more favorable basis to take up the temporary loans. Those concerns which were most harassed by inventory shrinkage and frozen receivables had as a rule been speculating in the price of raw materials, or had at any rate neglected too many of the precautions which should be taken in such periods. Whatever the reasons may have been in particular cases, the fact remains that many companies have been forced to issue first mortgage bonds with very stringent protective provisions, and at an exorbitantly high rate of interest, in order to provide "working capital" which two or three years previously they failed to conserve. Of course, under these conditions, the mere changing of the form of obligation does not necessarily increase interest payments, and there may be a very great immediate advantage in having the date of maturity of the debt postponed.

In the next place it should be noted that many security issues are put out in order to pay off old obligations or to change the nature of existing obligations. Until recently most of the so-called "refunding" issues were confined to railroads and public service corporations, which do not expect to liquidate their funded obligations when due. Such types of concerns frequently have a monopoly in their particular localities, and, as has earlier been explained, their business is ordinarily not subject to violent fluctuations, nor is there serious doubt regarding the permanency of the demand for their services, though there are, of course, outstanding exceptions.[1] Also it should be ob-

[1] In this connection attention may be called to the street railway situation. Some 15 or 20 years ago street railway securities were considered by many to be one of the soundest investments. It was impossible at the time to foresee that the general introduction of the automobile and the jitney could, if unregulated, destroy the investment position of street railway securities. At the present time no one would be so misguided as to consider the average street railway *bond* a prime investment. Obviously, from the economic point of view it would have been extremely fortunate had there been less rapid building of electric traction lines in this country. Thus there might have been

served that public service corporations have their rates regulated by public commissions, and are not allowed to charge for their services an amount which would enable them to amortize the investment which they secure largely through borrowing. Hence, it is an almost unavoidable practise for the various public service enterprises to refund maturing notes and bonds through the issue of new securities.

Industrial companies, on the other hand, are prevented by law from exercising monopoly, the competitive situation is usually keen, the earnings are usually unregulated except by taxation, and the future is always more or less uncertain. Hence, this type of concern is scarcely justified in regarding any of its loans as a perpetual obligation. Arrangements should, therefore, be made to retire industrial note and bond issues at their maturity. As a matter of fact, however, many industrial concerns have fallen into the practise of refunding their obligations without much regard to the theoretical merits of the case.

Until recently, the rapid decline in interest rates led to the issuing of many new securities in order to replace other issues frequently carrying a much higher rate of interest. Further, when rates were high and business was very uncertain during the latter part of the War period, every company endeavored to issue short time notes until the future could be more definitely forecasted. At the maturity of these notes, many of which ran for a period of only three to five years, or even for a shorter time, it became necessary to issue mortgage bonds in order to meet payment. This was not really evidence of a demand for new capital; there was merely a change in the form of already existing obligations.

saved much investment which it will soon be necessary to write off as a dead loss, or which at any rate can never hope in the future to earn an adequate return.

It was fortunate for England that her expansion along these lines was far less marked than that in the United States. Great Britain now finds it a simple matter to shift from street railways to motor busses, with very small loss in investment. The newer method of transportation is merely filling the gaps left in the old system.

Much risk also attaches to the securities of many hydro-electric companies, whose fixed charges are extremely high.

Further, many of the companies which have issued bonds carrying a very high rate of interest during the post-war years, reserved to themselves the right to "call" these bonds either in whole or in part. Due to the fact that in a year's time the interest rate for the higher class risks dropped from 1 per cent to 1½ per cent, or even more, most of these concerns have already availed themselves of their privilege to retire the high interest bearing obligations, and to replace them with securities issued at a lower rate, or by stocks. Hence, it was reasonable to expect for some years to come an increasing proportion of new security issues for refunding purposes. In many cases the debt of the company carries with it a conversion privilege which entitles the holder to exchange his credit obligations for stock in the company. Ultimately, therefore, as prosperity returned and dividends grew higher, there has been a large amount of new stock issued for the purpose of retiring notes and bonds. During the past few years between one-fifth and one-sixth of all security issues were for refunding purposes. As indicated by the following table, however, the proportion of refunding issues has, until recently, been very small in industrial concerns.

TABLE 12

Corporate Security Issues Classified Between New and Refunding, and by Major Industrial Groups[1]

(*Unit: $1,000,000*)

Group	1925		1926		1927		1928	
	Amount	Per Cent of Total	Amount	Per Cent of Total	Amount	Per Cent of Total	Amount	Per Cent of Total
Total Issues........	$4,738	100.0	$5,300	100.0	$7,301	100.0	$7,753	100.0
New.............	4,101	86.6	4,357	82.2	5,373	73.6	6,015	77.6
Refunding.......	637	13.4	943	17.8	1,928	26.4	1,738	22.4
Railroad...........	515	10.9	423	8.0	963	13.2	728	9.4
New.............	380	73.8	346	81.8	506	52.5	364	50.0
Refunding.......	135	26.2	77	18.2	457	47.5	364	50.0
Public Utilities.....	1,724	36.4	1,974	37.2	2,987	40.9	2,634	34.0
New.............	1,496	86.7	1,604	81.3	2,074	69.5	1,883	71.5
Refunding.......	229	13.3	370	18.7	912	30.5	751	28.5
Industrials.........	2,498	52.7	2,903	54.8	3,351	45.9	4,391	56.6
New.............	2,224	89.0	2,407	82.9	2,793	83.3	3,768	85.8
Refunding.......	274	11.0	496	17.1	559	16.7	623	14.2

[1]Based on figures published by the *Commercial and Financial Chronicle.*

Frequently very interesting questions of finance are raised when the form of ownership or organization of an established concern is changed. Securities must then be issued, even though there is no attempt at expansion. For example, in an already incorporated business a consolidation or a selling out to another company may necessitate the issue of new forms of capital obligation in order to satisfy the different interests. It may be that the owners of a company which has had outstanding only common stock will demand preferred stock or even first mortgage bonds in payment from the purchasing company. Or it may be necessary to exchange a certain amount of preferred stock along with the common of the newly formed enterprise. This matter has already been briefly touched upon above.

When a partnership becomes incorporated, it frequently happens that the owners are growing old and wish to have their investment in such a form that they can sell out if they wish, or make a proper distribution among their heirs. At such times it is frequently found that the fair value of the business for purposes of capitalization is far in excess of the value carried on the books of the concern. There will then be issued by the bankers who handle the matter a large amount of securities which do not at all represent the raising of "new capital," but which indicate extensive "new financing." The owners are frequently paid in preferred stock, which partially or wholly covers the tangible assets of the business at a conservative valuation, while the balance of the tangibles and the estimated value of patents, processes, good-will, and the like, will be covered by common stock, some of which will be taken by the bankers in payment for their services, the remainder being sold to the public.

Some banking houses make a specialty of financing of this sort. Perhaps the leaders in this field are Goldman, Sachs and Company. As an outstanding example of a closely owned business which, through change in ownership, gave rise to a large new financing, may be cited the Carnegie Steel Company. In his transaction with the newly formed United States Steel Corporation, Mr. Carnegie is said to have received $300,000,000

in bonds while his partners took their shares about equally divided between common and preferred stock, amounting in the aggregate to nearly $200,000,000.

B. By What Method, or in What Form, Shall the New Capital Be Supplied?

New permanent capital for a business may be supplied in several different ways, depending upon the nature of the business and type of its organization. An unincorporated concern may secure this capital: (*a*) through reinvested earnings; (*b*) by enlisting the further financial interest of the original partners or owners; (*c*) by securing new partners; or (*d*) by borrowing.

Probably the commonest methods of securing the funds needed for expanding an established concern which is unincorporated are through the reinvestment of earnings or an increase in the number of partners. The former method has usually proved the more satisfactory of the two, since the selection of a new partner is frequently a difficult matter. Also, those businesses which, from the nature of their work, tend to grow *rapidly*, usually favor the corporate form of organization. An unincorporated business finds its borrowing power somewhat restricted, so far as permanent funds are concerned, due to the legally limited duration of the business in its present form. The individual owner, or a group of partners, cannot issue funded obligations which commit the concern to fixed interest payments over a long period of time and definite maturity dates, in such a manner as to enlist the interest of the investor. As a rule not sufficient safety can be offered, inasmuch as the death of an owner or partner may utterly disorganize the business. It must not be thought, however, that partnerships fail to grow. On the contrary, as has been previously mentioned, there are outstanding examples of partnerships which have increased to enormous size largely through the reinvestment of earnings. In this connection one need only mention again the Endicott-Johnson Corporation or the Baldwin Locomotive Works.

The average unincorporated business, however, is small, and its growth is quiet and not generally noticed. Perhaps, therefore, it will be of most interest and significance to give brief attention to the methods whereby an established corporation can supply itself with new *permanent* capital. These methods may be reduced to three general heads:

1. Through the reinvestment of earnings;

2. Through the sale of additional stock, either to old stockholders or new owners;

3. Through borrowing, that is, primarily through the issue of funded obligations, secured or unsecured.

1. In the long run, it is probable that the safest and most satisfactory way for a business to expand, no matter what its type of organization, is through the reinvestment of earnings. The great majority of really successful business enterprises which have been in existence for a long period of time, have financed their development primarily in this way. There is far less likelihood that foolish chances will be taken or unwarranted expansions made when the business uses its own money and not that of outside interests. Various phases of this problem have already been touched upon, and from time to time throughout the following discussions the general desirability of this conservative policy of finance will be emphasized. An interesting comment on this method, hitherto so successfully followed by the Ford Motor Company, is made by one of the former chief officials of the Ford organization: [1]

> "A successful private business ought to make sufficient profit to pay for its extensions. The extensions that must be made out of borrowed money are apt to be unwise extensions."

However, the fact should not be overlooked that there are occasions when, from all points of view, it may be undesirable for a business, at a given time, to try to finance itself only through the reinvestment of earnings.

In the first place, the original owners may have made as much sacrifice as they can reasonably be expected to bear.

[1] Quoted from an article by Mr. Cousens, in SYSTEM, September, 1921, p. 261.

They are entitled to a fair return on their investment, commensurate with the degree of risk taken, and it might obviously work great hardship if they should from time to time be called upon to forego this reasonable return, so that the concern might put back their share of the profits into the business. Yet, even under these circumstances, it is usually true that present sacrifice on the part of the owners would result in more satisfactory earnings for them in the future.

Perhaps a more important reason why it is sometimes disadvantageous to depend upon earnings for purposes of expansion, is because of the occasional need for a very rapid increase in the business if it is to be increased at all. This situation frequently results from the competitive nature of most types of industrial enterprise. Sometimes, if a concern should wait for its expansion until the earnings were sufficient to provide the funds for that expansion, the earnings might never materialize. A competitor, in the meantime, might, by means of less conservative though perfectly safe financing, capture the best part of the market. Under such circumstances, ultra-conservatism in finance might lead to utter disaster. Since, therefore, there are unquestionably occasions when new funds must be secured from without the business itself, the usual methods for raising these funds must now be examined

RAISING NEW CAPITAL BY STOCK ISSUES

2. The most common method of raising additional permanent capital for an industrial corporation is through the issue of stock, either common or preferred. If not all the stock "authorized" by the charter has been issued, it is a simple matter for the officers, acting upon instructions from the stockholders, to put out more stock. If stock is held in the treasury, the process is even more simple. Otherwise it becomes necessary, through the action of the stockholders and the sanction of the state, to amend the charter so that the "capitalization" can be increased.

If stock issues are to be resorted to, the question frequently becomes very significant as to whether preferred or common

stock shall be sold, and on this point there is often much misapprehension in the minds of many people. In the first place, the company may attempt to issue preferred stock in order to *trade on its equity*. This is done on the theory that not more than 7 per cent or 8 per cent will have to be paid to the preferred stockholder, whereas the company can use the funds in such a manner as to earn a much higher percentage than this on the new investment, and thus larger dividends can be paid to the common stockholders. Thus, according to the theory, the common stockholders will avoid "diluting" their interest in the business. Perhaps an example will make clear the principle involved.

Let us suppose that a company with capital stock of $1,000,000 outstanding, all conservatively invested, is able to earn 15 per cent on this stock. This means $150,000 net income for the owners. Let us assume, further, that it appears highly probable that an additional investment of $1,000,000 will enable the company to earn profits at the same rate of 15 per cent on the total stock outstanding. If the second $1,000,000 can be raised through the sale of preferred stock carrying a fixed dividend rate of 7 per cent, it is obvious that out of a total net income of $300,000, $230,000 would remain for the common stockholders. In other words, they would have increased their possible dividends by 8 per cent on the original common stock, or their possible income from this source would have been raised more than 50 per cent. It is this probability or possibility of increased returns to the common stockholder that leads companies to issue some kind of "senior" obligation, when conservatism might demand merely an increase in the common stock. The fact ought consequently to be borne in mind that, in spite of past performance, all of these future prospects are *hopes* rather than *realities,* and it may be that the expected increase in earnings as a result of increased investment will not materialize.

At this point, attention may properly be called to one very important consideration relative to the more recent issues of preferred stock. This has to do with the attempt to make a real investment security out of preferred stock by hedging it

around with innumerable protective and restrictive covenants. Thus a false security is sometimes given to the owner of the stock, who forgets that he cannot be both an owner and a creditor of the business. Recent developments in this connection are, to say the least, of questionable expediency, and the practise has made a most anomalous instrument out of preferred stock. A preferred stockholder is an *owner* of the business and subject to the risks of ownership, and never can be given a creditor's position in the courts at times when a company meets with financial reverses. Further, it is a ridiculous conflict of interests for the preferred stockholder to be given even the semblance of a bondholder's investment position. Too frequently the common stockholders have made use of this device merely to enable them to maintain control, while the "investor" has furnished practically all the capital needed to develop the business, safeguarded only by the innocuous provisions of a modern preferred stock issue.

For a concern that has outstanding no bonds or notes, preferred stock may be a most satisfactory vehicle for new financing, and may entail little risk upon the purchaser of this type of securities. The fact remains, however, that if financing were carried on along more conservative lines, many common stock issues might have practically as strong an investment position as the "preferred" issues.

Frequently the generous issue of preferred stock by a corporation merely makes the position of the common stock more speculative, and actually tends to detract from the financial strength of an enterprise instead of augmenting it. This is particularly true when, by means of the stringent protective provisions imposed in preferred stock indentures, the company is handicapped in its future actions. "Restrictions," in themselves, will not make a weak company strong, and they may, on the other hand, seriously impair the strength of a strong company. The preferred stockholder is, to repeat, an owner—a partner of the business, and to try to protect one partner by hampering another, may produce an intolerable state of affairs

Of course, the fact should not be overlooked that many of the restrictive covenants imposed, both in preferred stock is-

sues and in bond issues, are due to the fact that a concern has gotten into such a position that its new financing is for the purpose of raising "working capital" of a more or less *permanent* sort. Often it has been necessary to raise this capital because the banks either would not, or could not, carry the company's loans any longer. Under such circumstances new security issues can properly be regarded almost in the light of deferred bank loans. Hence, the security for such issues may be thought of as the strength of the current position. It is, therefore, natural to apply the same tests of solvency as are used by the commercial banker. Whether or not this will ultimately prove to be a wise practise, it is difficult to say.

This fact, however, is certain: conservative investment bankers are tending to the conclusion that, so long as senior obligations are outstanding, the common stockholders should be restricted to a dividend not in excess of a conservative interest rate on their investment. The remainder should be "ploughed back" into the business as reinvested earnings until such time as, through sinking fund provisions, the senior obligations can be retired. This policy is being advocated in connection with preferred stock issues as well as bond issues, and to the extent that such action is effective, it is perfectly obvious that the common stockholder will not be the immediate gainer as a result of "trading on his equity." In fact, he could hope for high dividends only when all the capital invested is being supplied by himself!

It must not be thought, however, that companies always issue preferred stock merely because the owners wish to "trade on their equity." As a matter of fact, both law and custom have at times exerted a potent influence in fostering this policy of capitalization. For example, the federal income tax laws already referred to have declared that the capital procured through the sale of preferred stock may be regarded as part of the "invested capital" of a business, serving as a basis for the computation of the excess profits tax. Capital secured through the issue of bonds and notes, however, cannot be so construed. This situation has no doubt greatly stimulated the issue of preferred stock in recent years, until it was no longer possible

for most companies to raise money by the issue of such "junior" securities. Also, certain state laws which exempt the capital stock of "domestic" corporations from their general property tax or which do not impose an income tax upon dividends received from preferred or common stock, have encouraged the use of these instruments of finance in lieu of notes and bonds, which remain subject to the usual taxes. The situation until recently existing in Massachusetts furnishes an excellent example of the manner in which such legal provisions operated to encourage stock issues of both types, and to discourage the issue of funded obligations.

It must finally be borne in mind that investment "fads," as well as custom and tradition, have from time to time greatly influenced the nature of a company's capitalization. In 1919 and early 1920, for example, the preferred stock was one of the most popular instruments of finance. Soon the interest changed to notes or "debenture bonds," and before long few investors cared to buy anything short of first mortgage bonds. Some of the reasons for this change in investment demand have already been noted, while others will be indicated in due course.

Before leaving the subject of stock issues, perhaps some general mention should be made of the relative proportions existing between preferred and common stock in the better known industrial corporations, while later in the chapter some notice will be given to the relative importance of other forms of security issues.

In the period 1919-1927 there were more than 1,300 important preferred stock issues, amounting to around $4,700,000,-000, of which industrial companies accounted for about 55 per cent, and public utilities about 40 per cent. Preferred issues in 1928 were the heaviest on record.

An analysis of the more active corporations whose stock is listed on the New York Stock Exchange showed that on July 1, 1922, 210 different companies, out of a total of 447, had listed preferred stock issues. Of these companies, 25 reported both first and second preferred stock, making the total number of preferred issues 235. The par value of the preferred stock listed by these companies was about $4,500,000,-

000, of which about $2,750,000,000 was accounted for by the issues of 157 industrial companies. This computation would indicate that from 20 per cent to 25 per cent of the stock in 1922 listed on the Wall Street Exchange was preferred. For the entire United States, according to figures compiled by the Treasury Department, the par value stock issues of all corporations were divided in the proportion of 20.2 per cent preferred and 79.8 per cent common in 1926.

A study of 57 leading industrial corporations which had issued preferred stock by the end of 1918 reveals the fact that on the average their preferred stock issues amounted to about 76 per cent of the common stock. The corporations in question had, at the time, issued about $1,000,000,000 of preferred stock and their total stock issues amounted to about $2,250,000,000. The total capitalization of these corporations (that is, the stock and bonds outstanding) amounted to $2,750,000,000, and 36 per cent of this capitalization was in the form of preferred stock. In these corporations the aggregate issue of preferred stock and bonds exceeded the total common stock outstanding by 15 per cent. But the preferred stock amounted to only 23.2 per cent of the tangible assets.

In many companies the ratio of preferred stock would be much higher than this, while a large number have outstanding no preferred whatever. It is particularly common, as has been mentioned in another place, for department stores, chain stores, and similar organizations, to cover their entire tangible assets by means of a preferred stock issue, while an equal or much greater amount of common stock will be put out with a view to "capitalizing" intangibles. A study of 46 large miscellaneous industrial corporations indicates that about one third of them had, at the time of their latest incorporation, issued preferred stock up to the book value of their tangible assets. For the entire group, the preferred stock issues amounted to about seven-tenths of the tangible assets. These, however, were corporations recently organized.[1]

The accompanying table based on figures selected from Dewing's *Corporate Promotions and Reorganizations* indicates

[1] For further details on this point see Simpson, *The Capitalization of Good-Will*, pp. 44-45.

TABLE 13

Nature of Capitalization in 14 Industrial Corporations Which Were Later Reorganized[1]

Name	Date of Promotion	Ratio of Bonds to Stock (approximate)	Ratio of Bonds to Preferred Stock (*per cent*)	Per Cent of Tangible Assets to Total Securities (*per cent*)	Interest Rate on Bonds (*per cent*)	Dividend Rate on Preferred Stock (*per cent*)	Ratio of Total Interest Charges to Preferred Dividends (*per cent*)
United States Leather Co.	1893	1:21	9	46	6	8	7
National Starch Manufacturing Co.	1890	1:4	40	30	6	12	57
Glucose Sugar Refining Co.	1897	....	....	20	....	7	....
National Cordage Co.	1890	....	....	27	....	8	....
Westinghouse Electric & Manufacturing Co.	1891	....	....	102	....	7	....
National Salt Co.	1899	....	....	33	....	7	....
United States Realty & Construction Co.	1902	....	....	36	....	6	....
American Bicycle Co.	1899	1:3	104	39	5	7	74
American Malting Co.	1897	....	....	27	....	7	....
New England Cotton Yarn Co.	1899	1:2	114	58	5	7	83
Mt. Vernon-Woodbury Cotton Duck Co.	1899	1:1	116	35	5	5	116
Asphalt Company of America	1899	1:1	....	20	5	....	....
United States Shipbuilding Co.	1902	1:2	130	20	5	6	108
American Glue Co.	1894	....	....	65	....	....	....

[1] Based on figures given in Dewing's *Corporate Promotions and Reorganizations*, Chapter XX.

that the earlier consolidations and promotions depended largely upon preferred stock issues in order to secure new capital or to readjust ownership interests. In many instances it will be observed from the ratios given that the tangible assets were far from sufficient to cover even the bond issues without any protection whatever for the preferred stock. All of these companies were, to be sure, later plunged into financial difficulties, and perhaps as a result of their experience recent tendencies have been more conservative.

A further study of 164 typical industrial companies whose securities are listed on the New York Stock Exchange, reveals an interesting situation in the different types of industry. From a later table[1] it appears that preferred stock has been very liberally issued by sugar, automobile, and railroad equipment companies. As might be expected, the mining companies have not found it possible to issue many such securities.

Finally, it should be noted that the relative proportion of new stock issues varies rather closely with the trend of the business cycle. For example, during the depression of 1911 it appears that only 39 per cent of new capital issues was in the form of stocks, both common and preferred. In 1914 again, only 20 per cent was in this form. During the uncertain period of 1918, when definite restrictions on new financing were imposed by the Capital Issues Committee, only 31 per cent of new capital secured by industrial companies was raised by means of stock issues. In 1919, however, the amount thus raised was about 75 per cent of the total; but this had dropped at the end of 1921 to under 15 per cent. In 1928 stock issues again exceeded 50 per cent of the total shown in Table 16.[2]

In this connection it should be noted that the figures just discussed do not include the data for public utility companies as well as industrials. At no time has the relative proportion of stock issues been so high for public service corporations as for industrial concerns. Throughout the period, 1906 to 1921, it appears that little more than 20 per cent of the capital of public utility companies was raised by means of stock issues,

[1]Table 15, page 207.

[2]See page 208.

both common and preferred, and of this amount only one-third was secured through preferred stock issues.[1]

RAISING CAPITAL THROUGH LONG TIME BORROWING

3. In the light of preceding discussions it is perhaps unnecessary to examine in much detail the various arguments for and against the issue of bonds by industrial concerns. Many writers on the subject of corporation finance have expressed themselves almost gleefully regarding the possibility of securing increased earnings for the common stockholders by raising additional capital through bond issues carrying a comparatively low rate of interest. Their statements no doubt reflect the *wish* which exists in the minds of many common stockholders, whose desire is to keep control of the enterprise and increase their earnings without incurring any risks of ownership. The author recalls one writer who has gone so far as to state that the prices of commodities and the cost of living to the ultimate consumer have been greatly reduced because of the fact that corporations can raise new capital at a low rate of interest through the sale of bonds!

It is true that the sale of bonds is sometimes easier and less expensive than the sale of stock. Directors can sometimes issue bonds without consulting stockholders, and at any rate no change in the corporate charter is necessary. Selling commissions charged by bankers are lower than on stock, and frequently the market is better because the purchaser feels that he is securing special protection of his interests. Further, it is true that, from the company's point of view, concentration of control is made possible through bond issues. On the other hand, a business naturally incurs greater risks when it has funded obligations outstanding. This in turn may seriously impair its credit with the banks. For the latter reason it is common in this country not to include the current assets of an industrial concern under the lien of its bond issue, since the only security which a bank has for the repayment of its ordinary commercial loans is the strength of the borrowers' cur-

[1] See Table 17, page 208.

rent position. As industrial concerns are ordinarily heavy temporary borrowers from the banks, the logic of the situation is evident.

Again, it should be mentioned that there are certain types of industrial concerns which, because of the very uncertain and highly speculative nature of their business, cannot possibly sell bonds. For large numbers, however, this possibility is present, provided the average net income available for interest payments over a long period of time has been several times the interest required on the proposed bond issue. There are times, also, when the investment market will absorb practically no type of security but bonds. Necessity, therefore, rather than desirability may frequently force a company to issue bonds when the management might prefer a junior type of security.

Normally, however, a good many alternative methods of financing may be open to the average industrial concern which comes into the market for new funds. When such is the case, the invariable rule should be to choose that method of financing which will impose the smallest amount of *fixed* obligation upon the company. This means that the choice should be in the following order: reinvested earnings, common stock, preferred stock, notes, bonds. If the long-run point of view is taken, it should be sufficiently obvious that an industrial concern should not exercise the borrowing power just because it is able to do so or because there seems to be immediate gain to the common stockholders through this method of "trading on the equity." As has been previously indicated, the owners will probably not reap higher returns than before, provided they make arrangements to retire the funded obligations at maturity. Further, the very fact of borrowing by industrial companies tends to make the common stock a "speculation" rather than an "investment."

If companies were conservatively capitalized in the beginning and soundly managed in following years without any weakening of the stockholders' position through permanent borrowing, the common stock could be, and would be, in the majority of cases, a perfectly safe investment, provided the in dustry itself were of a seasoned, non-speculative sort. Under

such circumstances, the more cautious investor would put his savings into the common stock of the older and stabler types of industrial concerns, granting that he desires a higher rate of return than could be secured on municipal and government bonds. Such a practise would inevitably lead to greater conservatism and sounder administration of industrial enterprises, which, beyond a doubt, would tend to reduce the cost of living rather than to increase it. No financial policy could possibly lead to greater economic loss than the situation, now too common, in accordance with which the control of many business concerns is divorced from the investment interest in those same concerns. It is easy, under such circumstances, to risk "the other fellow's money" in ways which are wholly unwarranted and productive of much waste. Also, when the senior obligations grow heavy and the equities of the common stockholders become thin, the owners tend to lose interest in the business as it falls more and more under creditor control.

THE NEW ENGLAND METHOD OF FINANCING

At this point in the discussion attention should be called to what has sometimes been termed "the New England method of financing." This method means essentially two things. First, the business, if incorporated, shall be originally financed by means of common stock issues, and shall grow gradually and steadily through reinvested earnings or, under certain circumstances, through the sale of additional common stock. In the second place, if it should become necessary to borrow money due to unusual circumstances, this borrowing should be regarded as wholly temporary in its nature and should at the earliest convenient date be liquidated, either out of earnings or through additional stock issues.

Examples of this method of financing are afforded by large numbers of the New England textile mills and by such concerns as the United Fruit Company, which has uniformly financed its growth by means of common stock issues. Whenever this company has resorted to borrowing, the amounts raised have been relatively inconsiderable, and the loan has been speedily retired. In the year 1921, for example, the United

Fruit Company had outstanding a little more than $300,000 in 4½ per cent sinking fund debentures, and at the same time it had average income available for interest payment amounting to more than $18,000,000! It is small wonder that the stock of such a company, even in troubled times, can sell at a record high figure. This company is cited merely because of its size and general prominence; hundreds of other examples might be given, the history of which would reveal similar methods of financing.

Perhaps the following quotation from the 1921 report of the Industrial Securities Committee of the Investment Bankers' Association of America will be significant in this connection.

"There is a certain school of financing which might be called the New England type, not because limited to New England, but because it harmonizes so well with Yankee thrift and is perhaps most frequently exemplified in that region. The exponents of this school do not borrow, except from their banks to meet seasonal requirements. Expansion is provided through ploughed-back earnings, or through the taking of additional common stock by the old stockholders, and a higher percentage of profit on the stock is sacrificed for an improved and increased equity. The owner of a stock which has no senior security or prior debt holds a diversified investment. He owns a cross-section of his company and is as well off as his neighbor who may have a first mortgage bond, a debenture note, and preferred and common stock of a similar company with a less simple capital structure. Companies of this type had little to fear in the recent readjustment. Along with the rest of the commercial world they have faced a temporary shrinkage in profits, but have escaped the recurrent anxiety of semi-annual interest dates and a depleted treasury.

"This so-called New England type has developed largely through private capital, and in order to make this type of financial structure more common it will be necessary for investment bankers to do their share and sell *investment* stocks as well as bonds and notes. Unfortunately most dealers in securities sell bonds and notes as investments, and only sell stocks of what they frankly admit are speculations or promotions, whereas

there is no reason, if the proper care is exercised and the necessary responsibility assumed and granted to the issuing house, why investment bankers should not sell *investment* stocks. With the broadening education of our investing public, further progress in this direction is to be hoped for. It must be admitted that in many cases where stock issues have been distributed to the public on a large scale, such issues were not at the time proved investments and represented only the capitalization of future earnings. There is, however, no reason why consolidations or new corporations cannot be floated on an investment instead of a speculative basis, or why large issues of proved investment stocks cannot be made, if the investment banker is willing to educate his clientele."

DANGERS OF SHORT TIME LOANS

Another important question may be raised as to the type of funded obligation which a company shall issue. Here it should be explained that expediency or perhaps necessity may cause a company to follow a policy which under normal circumstances would scarcely be approved. As a general rule, however, short time notes and debentures should be issued rather than mortgage bonds for obvious reasons. Yet in the matter of short time note issues many a company makes a serious mistake. There is a natural tendency to postpone necessary permanent financing until the latest possible moment. Hence, many borrowers resort to the issue of serial notes and other short time obligations, frequently even depending upon the renewal of bank loans in order to finance permanent construction or to raise needed permanent working capital. The result is that such companies almost inevitably find themselves ultimately in a position where their creditors can force them to replace their temporary loans with the highest type of mortgaged security. Such haphazard and shortsighted financing has frequently made it necessary for the owners of a really conservative industrial concern to mortgage away practically all of their equity in the business and obligate themselves to work during the remainder of their lives for their creditors.

The rule, therefore, should be to issue temporary obligations only under circumstances in which the notes will be self-liquidating, that is, when the immediate situation leading to the issue of the notes will provide the means for their repayment. To issue short time instruments of indebtedness without a definite knowledge as to how the obligations can be met at maturity is to take a chance which no industrial company can as a rule afford to take. Of course, there are exceptional circumstances under which, due to abnormally high interest rates, it may seem desirable for a business to raise new permanent capital through the issue of short time notes in the hope that when the rates drop permanent obligations can be issued under more favorable conditions. This use of short time obligations in anticipation of longer term borrowing may be fully justified in practise, but the two reasons for using short time notes should be kept clearly distinct.

The point cannot be too strongly stressed that obligations should not be incurred without planning the means whereby those obligations can be liquidated. For the industrial enterprise this amounts to saying that conservatism demands that all possible avenues by which new funds can be secured should be left open. The company which owes little or nothing can ride the waves of business prosperity and depression with comparatively little danger. In this connection, perhaps, it will be of interest to recall the words of Mr. Eastman, referring to the time in the earlier days of his company, when, due to certain disappointments in the technical processes of the business, he was absolutely cleaned out of money:— "We were not bankrupt *because we did not owe anything to speak of.* We had no money with which to go forward and had to start crawling again. But we were not crawling for long. Soon we were walking once more and had the business in apparently splendid condition."

THE LONG TIME INTEREST RATE

As to the rate of interest which must be paid on new bond or note issues, that is scarcely a part of our present discussion.

Sometimes, however, a concern is definitely confronted with two alternatives. Shall bonds carrying a lower rate of interest be sold at a discount, or shall a higher rate of interest be paid which will permit them to be sold at par? No categorical answer can be given to the question. It is a matter primarily for the investment banker to decide. However, two considerations are pertinent. On the one hand, it might unfavorably affect the credit of a company to issue its funded obligations at a higher rate of interest than is ordinarily paid upon the funded debt of concerns engaged in a similar line of activity. Under such circumstances, the vote would naturally be in favor of the lower interest rate and selling at a discount, which, of course, would mean that the company would ultimately have to pay back a principal sum in excess of that which is received. Secondly, the company should try to determine whether it will be easier to meet a somewhat higher payment at maturity than to pay the higher annual interest charge which would be necessitated if the bonds were sold at par. Probably, under such circumstances, the young company would again vote for the sale of bonds at a discount, since in the earlier days it would usually be more difficult to meet the higher annual charge. On the other hand, if the company continues to be prosperous, it will not be difficult to meet the maturity date either through a refunding operation or through annual sinking fund payments.

As to the actual rate of interest which shall be paid, an adequate discussion would open up the whole mooted question of the economic theory of interest as well as the theory of the Business Cycle. Interest rates on high grade bonds fluctuate more rapidly than is sometimes supposed, because of changes in the general business situation. Table 14, while primarily representing only tendencies rather than definite figures, may be of some significance.[1]

No attempt is here made to discuss the theory of true interest, but merely to point out some of the considerations which influence particular rates for long time borrowing, depending primarily upon the nature of the risk involved. The degree of

[1] Based on *Moody's Investor's Service,* and publications of *Standard Statistics Company.*

TABLE 14

The Price of Capital

A. Comparative Yield Rates on New Investment Issues in the United States, 1903-1928

Year	Municipal Bonds	Railroad Bonds	Public Utility Bonds	Industrial Bonds	Industrial Preferred Stocks	Foreign Governments	Price of Capital
1903	3.31%	4.10%	4.63%	5.69%	7.27%	....%	5.00%
1904	3.35	4.05	4.60	5.81	7.33	....	5.03
1905	3.40	3.91	4.43	5.19	6.34	....	4.65
1906	3.60	4.01	4.56	5.18	6.32	....	4.73
1907	3.90	4.30	4.91	5.76	6.97	....	5.17
1908	3.82	4.35	5.11	5.90	7.09	....	5.25
1909	3.90	4.08	4.71	5.16	6.13	4.91	4.79
1910	4.00	4.21	4.79	5.25	6.23	5.01	4.89
1911	4.06	4.23	4.77	5.17	6.25	5.01	4.89
1912	4.15	4.26	4.80	5.18	6.16	5.03	4.91
1913	4.30	4.41	4.90	5.35	6.42	5.19	5.05
1914	4.28	4.92	5.01	5.96	6.88	5.54	5.23
1915	4.35	4.89	4.81	5.57	6.83	5.42	5.27
1916	3.97	4.75	5.46	5.26	6.46	5.31	5.28
1917	4.22	5.10	5.40	5.97	6.98	5.66	5.43
1918	4.54	5.79	5.66	6.46	7.19	6.07	5.74
1919	4.62	5.96	6.30	6.57	7.26	6.32	6.01
1920	5.20	6.97	7.61	7.70	7.80	7.44	6.04
1921	5.50	6.66	7.61	7.89	7.88	7.58	6.77
1922	4.36	5.57	6.44	6.82	7.40	6.83	6.40
1923	4.41	5.64	6.28	6.56	7.30	6.68	6.08
1924	4.27	5.22	6.13	6.47	7.09	6.60	5.93
1925	4.12	5.27	5.67	6.19	7.04	6.99	5.80
1926	4.26	5.04	5.62	5.91	6.89	6.98	5.74
1927	4.09	4.85	5.34	5.73	6.47	6.48	5.49
1928	4.19	4.62	5.39	5.81	6.15	6.33	5.43

B. Average Yield Rate on High Grade, Seasoned Securities, 1919-1928

Year	Municipal Bonds (15)	Railroad Bonds (15)	Public Utility Bonds (15)	Industrial Bonds (15)	Average of 60 High Grade Bonds	Preferred Stocks (20)	Common Stocks (33)
1919	4.46%	5.29%	5.84%	5.40%	5.25%	6.31%	6.74%
1920	4.98	5.79	6.73	6.01	5.88	6.79	7.50
1921	5.09	5.57	6.56	5.96	5.79	6.80	7.95
1922	4.23	4.85	5.46	5.21	4.94	6.14	6.31
1923	4.25	4.98	5.41	5.26	4.98	6.12	6.63
1924	4.20	4.78	5.22	5.21	4.85	6.08	6.02
1925	4.09	4.67	5.06	5.06	4.72	5.90	5.31
1926	4.08	4.51	4.90	4.91	4.60	5.78	5.25
1927	3.98	4.31	4.78	4.83	4.47	5.51	5.25
1928	4.05	4.34	4.67	4.88	4.49	5.35	4.43

risk, the general business conditions, the demand and supply of capital, and the nature of the investment market, are the important general factors to be considered. The following suggestions may throw some light on the numerous divergencies in long time interest rates from borrower to borrower and from time to time:

(*1*) What is the type of business? Is it seasonal or all year round? Is it stable or speculative? (*2*) What is the age of the borrowing concern, and what has been its past record of performance? (*3*) Is the location of the plant satisfactory? (*4*) In what section of the country is the business located? (*5*) What has been the nature of the growth of the business? How has it been financed in the past? (*6*) Is the company affiliated in any way with other companies? If so, what is their record and their financial strength? (*7*) What is the general record of earnings in the past? (*8*) Is the company a high cost producer, or a low cost producer? (*9*) What will probably be the future demand for the product? (*10*) What in general is the competitive situation? (*11*) What is the nature of the company's relations with its employees? (*12*) What is the company's reputation with the public? (*13*) Are the character and personality of the officers such as to insure continued successful operation? (*14*) What is the purpose of the loan? (*15*) What is the nature of the underlying security offered? (*16*) What are the terms of the issue? Has it any especially attractive factors? Is the security tax exempt? (*17*) What is the state of the investment market, and what types of securities are selling to the best advantage? Is long time capital plentiful? (*18*) What is the stage of the business cycle? What are the general business conditions, and what are the future prospects?

PREVAILING FORMS OF INDUSTRIAL CAPITALIZATION

Though there are many other interesting phases of this question which might properly be considered, it seems desirable here to end the discussion by examining briefly the form which the capitalization of various industrial corporations has actually taken in practise. The accompanying tables, therefore, should be of some interest to the reader, and in the main they are self-explantory. The combined balance sheets of all reporting United States manufacturing companies and trading companies show the following proportions in their capitalization in 1926:

Type of Security	*Manufacturing*		*Trading*	
	Amount	Per Cent of Total	Amount	Per Cent of Total
Common Stock	$23,980,000,000	67.1	$6,836,000,000	74.8
Preferred Stock	6,898,000,000	20.8	1,772,000,000	18.9
Bonds and Notes........	4,340,000,000	12.1	584,000,000	6.3
Total	$35,218,000,000	100.0	$9,142,000,000	100.0

At about the same date, 59 of the *leading* industrial companies reported the following proportion of securities: common stock, 56.2 per cent; preferred stock, 23.2 per cent; bonds, 20.6 per cent.

A further computation was based on the aggregate balance sheets of 402 typical industrial concerns for the year 1918, engaged for the most part in manufacture. The total capitalization of this group amounted to $3,581,000,000, of which bond and note issues amounted to exactly 13 per cent, or $465,-000,000. This same group of companies reported practically the identical proportion of their capitalization in bonds during the year 1914. Still another group of more than 250 industrial corporations of all sorts in the year 1918 reported an aggregate capitalization of $7,270,000,000, of which the funded indebtedness amounted to 21 per cent. In 1911 the same companies reported a total capitalization of $5,388,000,000, of which nearly 24 per cent was in bonds and notes.

From these figures it can be seen, therefore, that for the average industrial corporation one might reasonably expect the proportion of bonds and notes in the capitalization to be 20 per cent or less, provided it is the type of concern which may properly issue funded obligations. In the average public utility, the proportion is about as follows: electric light and power stations, 45 per cent; hydro-electric stations, from 50 per cent to 60 per cent; and electric street railways, from 55 per cent to 60 per cent. The ratio of debt to total capital in steam railways was 56 per cent in 1920 and has for a long period of years averaged about 55 per cent.

Finally, it is interesting to note that in the various types of public utilities, preferred stock has played a relatively unimportant part in the capitalization, due, no doubt, to the steady nature of their business which has made it possible for them

to issue bonds rather liberally. While preferred stock is common in railroad capitalization, the cumulative provision is less frequent than in industrial companies.[1]

The accompanying tables indicate even more clearly certain tendencies in corporation capitalization. Table 15 shows the situation in 164 typical companies selected from eight important industries, for the years 1910 and 1920. These companies were all listed on the New York Stock Exchange. In studying this table it is, of course, well to bear in mind the fact that by the end of 1920 there was a decided tendency to increase the relative amount of preferred stock or bonds outstanding.

In Table 16 are shown the relative proportions of new stock, bond, and note issues of industrial corporations for the years 1919-1928. It was not possible, in making this computation, to separate preferred and common stock.

Further, it should be noted that the various local public service corporations during the war period and for two or three

[1] It may be of interest to note the proportions of the various types of securities outstanding in the industrial consolidations of twenty years ago. On pages 561 and 562 of Volume 70 of the *Commercial and Financial Chronicle* a list of industrial consolidations of the year 1899 was compiled, from which the following tabulation was made by Professor Dewing. All public service and mining enterprises were excluded, as well as all industrial consolidations which did not appear to be actually going concerns. Also all incorporations with total capital under $1,000,000 were eliminated. The results of the tabulation are as follows: (Cf. Dewing's *Financial Policy of Corporations,* Volume IV, page 37.)

NUMBER OF CONSOLIDATIONS

Total number of incorporations	259
Number having common stock only	117
Percentage of total having common stock only	45%
Number having common and preferred stock	105
Percentage of total having two or more classes of stock	40%
Number having bonds	37
Percentage having bonds	15%

CAPITALIZATION OF CONSOLIDATIONS

Total capitalization of the 259 corporations	$2,893,880,000
Total common stock	1,865,930,000
Percentage of total capitalization represented by common stock	64%
Total preferred stock	838,350,000
Percentage of total capitalization represented by preferred stock	30%
Total bonds	189,600,000
Percentage of total capitalization represented by bonds	6%

TABLE 15

PERCENTAGE OF THE VARIOUS TYPES OF SECURITIES OUTSTANDING IN 164 INDUSTRIAL COMPANIES WITH LISTINGS ON THE NEW YORK STOCK EXCHANGE, 1910 AND 1920

Type of Industry	No. of Companies	Common Stock	Preferred Stock	Mortgage Bonds	Debenture Bonds	Misc. and Subsidiaries' Bonds	Notes	Total Capitalization (Unit $1,000,000)	No. Shares of No Par Value (Unit 1,000,000)
Coal and Iron...	20								
1910.......		45.5	13.3	7.7	0.4	32.8	......	235	1.5
1920.......		50.2	18.0	8.7	4.0	18.6	......	302	1.5
Iron and Steel...	25								
1910.......		37.2	25.0	2.6	0.8	34.3	0.5	1,682	
1920.......		38.0	25.0	3.2	2.1	31.6	0.03	2,360	2.3
Mining.........	42								
1910.......		78.5	21.0	0.2	......	......	0.1	536	
1920.......		71.7	12.1	4.1	6.0	5.9	0.3	922	5.0
Oil............	19								
1910.......		......	......	......	......	......	......	....	....
1920.......		54.5	30.0	1.7	2.7	1.0	11.0	859	9.2
Railroad Equipment.........	10								
1910.......		48.0	42.8	1.8	......	3.7	3.7	189	
1920.......		54.5	39.0	4.3	......	2.4	......	277	
Automotive and Auto Accessory	22								
1910.......		......	......	......	......	......	......	....	
1920.......		44.3	52.0	......	......	......	3.8	409	22.5
Sugar..........	14								
1910.......		55.0	44.5	......	......	0.4	......	127	
1920.......		46.0	52.5	0.3	......	.....	0.8	232	0.6
Tobacco........	12								
1910.......		24.7	35.8	......	39.4	......	......	267	
1920.......		42.0	31.6	......	13.1	3.3	10.3	389	0.1
Total.....	164	......	......	......	......	......	......	5,750	41.2

years thereafter, could not raise capital by means of stock issues. Accordingly, public utilities for several years financed themselves almost wholly by bond and note issues. In fact, little more than 11 per cent of their new securities issued during the three-year period ending in 1920, was in the form of common and preferred stock. During the entire fifteen-year period, 1906-1920, almost 80 per cent of the new issues were in notes and bonds, the latter amounting to about 55 per cent. Incidentally, it is interesting to note that the capitalization of

TABLE 16

Reported Issues of Industrial and Miscellaneous Bonds, Notes, and Stock, 1919-1928[1]

(Unit: $1,000,000.)

Year	Bonds Amount	Bonds Per Cent of Total	Notes Amount	Notes Per Cent of Total	Stock Amount	Stock Per Cent of Total	Total
1919.....	$ 325	15.7	$ 215	10.4	$1,530	73.9	$2,069
1920.....	660	31.5	421	20.1	1,010	48.3	2,092
1921.....	784	73.6	127	11.9	154	14.5	1,065
1922.....	1,083	75.2	64	4.4	295	20.5	1,441
1923	1,032	65.5	97	6.2	447	28.4	1,576
1924.....	880	64.3	200	14.6	289	21.1	1,369
1925.....	1,540	61.6	213	8.5	746	29.9	2,498
1926.....	1,916	66.0	198	6.8	789	27.2	2,903
1927.....	2,425	72.3	195	5.8	732	21.8	3,353
1928.....	1,887	43.0	109	2.5	2,396	54.6	4,392

[1]Based on figures published by the *Commercial and Financial Chronicle.*

TABLE 17

All Domestic Corporate Security Issues Classified by Type and by New and Refunding, 1923-1928[1]

(Unit: $1,000,000)

Type of Security	1923 Amt.	1923 Per Cent of Total	1924 Amt.	1924 Per Cent of Total	1925 Amt.	1925 Per Cent of Total	1926 Amt.	1926 Per Cent of Total	1927 Amt.	1927 Per Cent of Total	1928 Amt.	1928 Per Cent of Total
Bonds (Long Term)...	$2,262	71.3	$2,319	65.8	$2,667	63.2	$3,059	66.9	$4,466	68.7	$3,169	46.2
New..............	1,846	58.2	1,924	54.6	2,231	52.9	2,418	52.9	2,962	45.6	2,170	31.6
Refunding..........	416	13.1	395	11.2	436	10.3	641	14.0	1,504	23.1	999	14.6
Notes (Short Term)...	180	5.6	336	9.5	308	7.3	294	6.4	306	4.7	265	3.9
New..............	143	4.5	276	7.8	221	5.2	249	5.4	224	3.4	211	3.1
Refunding.........	37	1.1	60	1.7	87	2.1	45	1.0	82	1.3	54	0.8
Preferred Stocks......	407	12.7	346	9.8	637	15.1	543	11.8	1,048	16.1	1,383	20.1
New..............	335	10.5	318	9.0	594	14.1	590	11.1	868	13.4	1,135	16.5
Refunding.........	72	2.2	28	.8	43	1.0	34	.7	180	2.7	248	3.6
Common Stocks......	329	10.4	520	14.8	610	14.4	677	14.8	675	10.4	2,048	29.8
New..............	324	10.2	511	14.5	558	13.2	578	12.6	592	9.1	1,766	25.7
Refunding.........	5	.2	9	.3	52	1.2	99	2.2	84	1.3	282	4.1
Total................	$3,178	100.0	$3,521	100.0	$4,222	100.0	$4,574	100.0	$6,495	100.0	$6,865	100.0
New...............	2,648	83.4	3,029	86.0	3,604	85.4	3,754	82.1	4,645	71.5	5,281	76.9
Refunding..........	530	16.6	492	14.0	618	14.6	820	17.9	1,850	28.5	1,584	23.1

[1]Based on figures published by *Commercial and Financial Chronicle.*

all public utility companies, including railroads, was in 1926 as follows: common stock, 51.3 per cent; preferred stock, 16.0 per cent; bonds, 32.7 per cent.

C. From What Sources Shall the New Capital Be Secured?

The unincorporated enterprise must ordinarily look for its additional permanent capital to the present owners or their friends. As was suggested above, the partnership frequently secures the funds for expansion by taking in a new member of the firm. If a new partner is to be taken in, the question becomes one much broader than of mere financing. Great caution will have to be exercised in order to secure a wholly satisfactory and congenial partner. This will necessitate careful examination of his past record and experience as well as of his character and personality. None of these matters need concern us in the present connection.

It is surprising to know how many small unincorporated businesses endeavor to secure new capital by means of advertising with a view to finding someone who will enter the organization as a partner or in some other capacity. The leading New York Sunday papers nearly every week contain scores of advertisements of this sort. The amounts of new money desired are frequently very large indeed and the types of businesses involved are numerous. In one issue of the *New York Times,* published in the spring of 1921, there appeared more than 100 advertisements of this sort calling for new capital. Every imaginable kind of enterprise from a little crocheting business to a private banking concern was included. The sums called for ranged from only a few hundred dollars to several hundred thousand dollars. The inducements offered to the individual who would be willing to furnish funds varied from the mere promise of a good rate of interest with an uncertain degree of security, to the offer of a permanent and

profitable personal connection with the business. It would be interesting and significant to follow the sequels of some of these advertisements for new permanent capital. In certain instances such appeals are doubtless semi-fraudulent, while in many cases the writer knows them to be made by thoroughly sound and reputable concerns, who have found this method of securing new funds a valuable one, since it gives them a wider market to choose from. However, the average soundly managed concern would not care to raise funds in this way.[1]

STOCK SELLING BY THE COMPANY

The incorporated business, provided it does not expand wholly by reinvesting its earnings or borrowing from banks, can as a rule raise permanent funds only through the sale of securities. These may be sold either by the company itself or through investment bankers. Let us note briefly the first method of handling the financing.

A company marketing its own securities may raise funds from several different sources: (*a*) by appealing to the "insiders," that is, to the chief officers or heavy stockholders of a "closed" corporation; (*b*) by selling new stock to the stockholders on a *pro rata* basis; (*c*) by selling stock to employees and customers; (*d*) by selling stock or other securities to the public in general.

The first three sources of funds necessitate only a *private* selling campaign on the part of the company, while the last

[1] The reader can draw his own conclusions regarding the following advertisement which appeared in a recent issue of a leading New York daily:*

A PROSPEROUS
NEW ENGLAND INVESTMENT HOUSE

Is desirous of SECURING CAPITAL to open New York offices with New York Stock Exchange membership.

Any person with capital to invest will become a member of this investment and brokerage house.

The New York offices will be opened as soon as the necessary capital is raised. The person investing will become a PARTNER participating in profits of the business of all offices.

* *New York Times,* May 2, 1922.

method mentioned requires the use of advertising and frequently the employment of salesmen. Because of the growing significance of the third method, a separate chapter will be devoted to a discussion of the attempts to enlist the investment interest of customers and employees.

PRIVILEGED SUBSCRIPTIONS

When the stock of a company is selling at a premium and is widely distributed, it is frequently possible for the management to offer new stock to the present holders at a concession. Frequently a stock selling above par may be offered at *par*. This is known as a "privileged" subscription, and the "right" to subscribe, under such circumstances, may be valuable. These *rights* ordinarily cover only stock subscriptions, though frequently extended in some form to bond holders. The value of such "rights" may be concretely explained as follows.

Let us assume that a corporation has outstanding 10,000 shares of stock, and the shares are selling at a premium of $25, or $125 per share. The company, wishing to raise $500,000 from the old stockholders, offers them the right to subscribe to 5,000 shares of stock at par (100) on the basis of one share of new stock for each two shares of old. The market value of the 10,000 shares would be, according to our assumption, $1,250,000. As the sale of new shares would add only $500,000 to the corporate investment, theoretically the value of the old shares would be "diluted." The aggregate market value of these 10,000 shares plus the subscription price of the new shares, $500,000, would give the theoretical total value of the outstanding 15,000 shares immediately after the issue of the new stock, or $1,750,000. This would indicate a value per share of $116.66⅔.

What, then, is the value of the "right" to subscribe to the new shares at par in this particular case? Is it $25? Certainly not. The two old shares have each lost $8.33⅓ in selling price, or a total loss of $16.66⅔. The actual value of the theoretical "right," therefore, is the difference between the

existing premium, \$25, and the total decrease in value of the original shares, or \$8.33⅓. This may be expressed in a formula as follows:

$$R = \frac{MO - PN}{SN + 1}$$

In this equation, R = value of the "right"
MO = market value of the old shares
PN = offering price of the new shares to the old stockholders
SN = number of shares of old stock entitled to one share of new stock

Substituting the values above given, the equation becomes:

$$R = \frac{125 - 100}{2 + 1} = 8\tfrac{1}{3} \text{ or } \$8.33\tfrac{1}{3}$$

Needless to say, this theoretical value is not always realized in practise. It usually happens also that "rights" are valued highest at the beginning of the subscription period. However, it is not needful for present purposes to follow the discussion of this subject further.

This method of offering shares to old stockholders does not, of course, make possible the wider distribution of ownership which many a growing concern wishes to attain. If, therefore, the company proposes to sell its securities to a new group of individuals aside from customers, employees, and dealers, it becomes necessary to resort to publicity methods of some sort. This usually takes the form of newspaper advertising combined with letters sent to a selected list of prospective buyers, backed up by the personal solicitations of a salesman. Frequently the campaign is handled more quietly without any newspaper publicity. To show how the problem is sometimes handled, the

following advertisement may be of interest. It was recently distributed rather widely through the mails by a well-known Eastern manufacturer.

THESE ARE THE BIG FOUR

1. Absolute safety of Principal.
2. Larger Income.
3. Exemption from Taxation in most States.
4. Market has always been maintained by the Company.

An investment having these four big essentials is not often found, but it is now available for you.

Do not hesitate because you can invest but a small amount; let me send you information by which you may judge for yourself.

Just send me the enclosed card—it can't hurt you—and I believe it will help you.

When replies to this advertisement were received, a salesman was sent around by the company to follow up the "lead." In this particular case it happened that one of the salesmen "spilled the beans" by giving out the information that, as there were not sufficient orders to keep the factory running, the employees were then being utilized as stock salesmen, since the company was greatly in need of additional capital to tide it over present emergencies! Frequently, similar contacts are made through newspaper advertising. The one who replies to such advertisements is then interviewed by the company's salesman.

Needless to state, if a campaign of this sort is entered upon, great care should be taken not to misrepresent the facts and not to sell new stock at a rate higher than that quoted on the open market for the old stock. In the above-mentioned instance, which is more or less typical, the company's stock was not listed on any exchange and the new preferred stock was being offered at par, even though the preferred already outstanding was being occasionally traded in for 75 to 80. Such a stock-selling campaign, therefore, injured rather than helped the company when the facts became known, even though its general reputation had hitherto been conservative.

Of course, the larger corporations which wish to sell their own stock may have the new shares listed on some stock exchange, thus securing a wider distribution and a better market. The mere act of listing, however, does not sell the shares. It merely facilitates their potential distribution. Of this point further mention will be made in Chapter XI. Also, it should be noted that the larger corporations which raise funds in this way frequently have subsidiaries, the purpose of which is to act as the investment house for the parent company. This has been particularly true of various public utility holding companies. As examples may be mentioned the H. M. Byllesby Company, which makes a market for the securities of the Standard Gas and Electric Company and its subsidiaries, and the Bell Telephone Securities Company, which handled the recent $90,000,000 issue of the American Telephone and Telegraph Company. Such organizations as Stone & Webster also frequently sell through their investment department the securities of companies managed by them. Some of the larger companies even "make a market" for securities thus issued by agreeing to repurchase them at a price somewhat below the offering price.

The vast majority of industrial corporations secure the funds needed for expansion without resorting to the aid of investment bankers. By some means or another they sell their own securities, mostly in the form of new stock. There are many outstanding examples of large and highly successful concerns, particularly in the shoe and textile business in the New England states, which have invariably financed themselves by this private method.

POSSIBLE DISADVANTAGES OF SELLING STOCK BY THE COMPANY

Concerns financed in this manner may save a good deal of expense and may avoid much publicity of a distasteful sort. Also employees may sometimes be used as salesmen with good results. On the other hand, such a policy may bring with it a number of disadvantages among which the following may be mentioned.

1. The company may lack the knowledge of the market and of the "technique" needed for the profitable selling of its securities.

2. This method of raising new capital may be a serious drain on the energy of the officers of the corporation and may divert attention from the usual important work.

3. Frequently the sale of securities by the corporation proves to be too slow a method of raising funds, since from the nature of the case it has to be carried on gradually.

4. A concern attempting to sell its own securities may, through a mishandling of the matter, put itself in bad odor with the public.

5. The failure to sell a sufficient amount of securities to raise the capital needed at a given time may react in such a manner as to injure the credit of the company as well as seriously to hamper its operations.

6. If a company markets its own securities, the investor may draw the conclusion that this policy is followed because no broker will handle the issue. Thus credit may be further injured.

All of the disadvantages just mentioned probably apply more pertinently to the sale of bonds than of stock, for the former is a much more complicated matter. Inasmuch as a large proportion of the more important new financing is done through the medium of investment bankers, and since wider distribution is in a large number of cases secured through listing on the stock exchange, the following chapters will be devoted to this method of raising funds.

CHAPTER X

THE BUSINESS AND THE INVESTMENT BANKER

Changed attitude regarding industrial securities as investments—Growth of investment banking houses—Functions of the investment banker—1. Selecting the borrower—Methods of investigating the investment risk—2. Marketing the security—3. Protecting the investor—Educating the public—4. The investment banker as a business adviser—Popular misapprehension regarding investment banker control—Advantages gained by selling securities through the investment house—Blue sky legislation.

UNTIL about 25 years ago no one thought of the securities of industrial corporations as investments, and until the last decade practically all industrial stocks were regarded as speculative. There have, however, been a number of interesting and significant changes in investment sentiment during the past 10 years, due in a considerable measure to the marked changes in management, resulting from recent major swings of the Business Cycle following the World War.

While prices were tending slowly upward, and the country was expanding at a more rapid rate, the securities of railroads and public utility enterprises were looked upon as prime investments. However, as public commissions regulated rates downward and the costs of operation began rapidly to mount, both because of the retardation in the growth of population and the great increase in operating expenses, railroad and local utility securities gradually fell into disfavor. The industrials, partially as a result of large wartime earnings, then began to come into their own. One need only examine the quotations of railroad and public utility stocks and bonds to see that, whereas many were selling on a 4 per cent to 5 per cent income basis before the Great War, by the end of 1920 these self-same securities were selling to yield from 7 per cent to 8 per cent, or even higher. In fact, for a few years many thoroughly sound public service corporations were being forced

to pay for their borrowed capital at a higher rate than that paid by many industrial corporations. In the past few years their credit has been fully restored, yet it is probable that the railroads and local utilities will never again occupy their former uncontested position as the most favored type of investment after the various governmental and municipal issues. At any rate the railroads seem to have lost their prime position.

The tremendous scale of recent new financing has led to a great increase in the number of so-called investment bankers. Formerly these private banking institutions were customarily referred to as "bond" houses, due to the fact that the scope of their operation was usually limited to dealing only in bonds, particularly the debt issues of various public bodies and of railroads. However, the situation is at present much changed. An examination of preceding tables will reveal the fact that the larger part of financing during the past few years has been carried on by industrial concerns of the different types. Further, a substantial proportion of the new industrial issues underwritten by investment bankers has been in the form of stock, until within the last two years.

Practically all "investment houses" of any consequence are members of the Investment Bankers' Association of America. In January, 1928, the membership of this organization was composed of 685 main offices, and in addition 376 "branch" offices, with a total membership of 1,061. In order to be a member of the Association, a banking house must have a paid-in capital of at least $50,000, and must make a practise of buying bonds or investment stocks and publicly offering the same as dealers. For purposes of membership, three general groups are created: (*a*) Those houses which "originate" issues, and deal only in wholesale, selling to other investment houses; (*b*) the so-called "participating" houses, which occasionally originate small issues, but usually participate in underwriting syndicates formed by the major group, buying from them and distributing widely throughout the country; and (*c*) the "retailers," who supply only the local market. The annual membership fees vary in accordance with the "class" of membership from $250 to $75.

Some of the members handle practically every type of issue that is put out, whether governmental, railroad, public utility, or industrial. Others deal for the most part in only one or two types. Examples of the former are, at present, Dillon, Read & Company, and Lee, Higginson & Company. Of the more specialized houses may be mentioned, as examples, Bonbright & Company, who have usually confined themselves to public utility securities; Kuhn, Loeb & Company, railroads; R. L. Day & Company, specializing in municipal bonds; and Goldman, Sachs & Company, who formerly made a specialty of industrial preferred stock issues.

From the mention which has been made of the number of investment banking houses, it is apparent that they are playing an important role in the work of distributing the securities of various corporations. It will be interesting, therefore, to consider briefly the functions and methods of these financial middlemen, and to indicate some of the economic advantages arising from this form of the division of labor. Perhaps their functions can best be summed up as follows: (*1*) selective; (*2*) distributive; (*3*) protective and educative; and (*4*) advisory.

SELECTING THE BORROWER

1. A reputable banking house will not find it possible to assist in selling the securities of more than a very small proportion of the companies which appeal to it for aid. The reputation of the selling house depends almost entirely upon the character of the securities sold. Hence, from all points of view, great caution must be exercised in selecting the "risk." The better houses probably turn away 99 per cent or more of the issues which they are called upon to put out. One house that the writer recalls boasts that "only one loan in a thousand is good enough for us and for our clients." Many concerns are, as a matter of course, turned away because of their unsatisfactory financial condition, or because of the character of their management or the type of business which they carry on. Ordinarily, the investment house would immediately "pass up" any com-

pany the nature of whose business is largely speculative or whose average net earnings during the preceding five years had not been several times as much as would be required to pay the dividends or interest on the proposed issue of securities. This, however, would be merely a beginning. Innumerable investigations and analyses must be made by the bankers in order to determine whether, from their point of view, it seems desirable to sell *any* securities of the particular company, and, if so, the type which shall be issued. The banker must think not only of the company's point of view and of its immediate needs, but also of the long run results of the financial policy adopted.

Further, strict attention must be given to the investment market, and the demands and necessities of the prospective purchasers of the securities. Naturally, the banking house must have in mind the various primary requirements of an investment security, such as (*a*) security of principal, (*b*) stability of income, (*c*) rate of return on investment, (*d*) marketability, and the like. This means that the competitive situation, both actual and potential, must be carefully examined.

Attention must also be given to the value of the fixed assets of the business, particularly if a bond issue is to be underwritten. It is true that the chief security back of an industrial bond issue is earning power, yet, granting the past and present earning power, it is highly desirable to know the condition of those tangible assets which make the earnings possible. It is likewise important to limit any funded obligations to a small proportion of the fixed assets. Since mortgages can be placed only upon tangible "fixed" property, theoretically the only sources of payment of principal in case of foreclosure would be a sale of the "fixed" assets, such as plant, equipment, and real estate. Hence, it has been found wise to limit industrial bond issues to a rather small percentage of the fair value of the tangible assets of a business. This proportion can rarely with safety exceed about 30 per cent or 35 per cent, and in most cases is, and should be, much lower. Purchase money mortgages, however, are occasionally issued up to 60 per cent, or even 75 per cent of the appraised value of real estate, and buildings, though conservatism demands a lower proportion—not above 50 per cent.

However, it is scarcely necessary to say more regarding the "selective" function of the investment house, for it may be asserted without fear of contradiction that in their investigations prior to initiating new financing, they tend to be very conservative, and to follow along the lines already clearly indicated in preceding chapters. The appended outline for a report on an industrial company used by one of the leading investment houses, may be of some interest to the reader, though it is well to bear in mind that this "outline" is but a beginning. The balance sheet and income analyses can be better appreciated by the student after a study of Chapters XIII and XIV.[1]

[1] Suggested Outline for Report on an Industrial Company:

A—History of Firm.
- 1—Early history.
- 2—Consolidations.
- 3—Controlled interests.
- 4—Reorganizations.

B—Nature of Industry.
- 1—Products manufactured.
  - (*a*) Diversification.
- 2—Integrated or disintegrated.
- 3—Standardization.
- 4—Large scale.
- 5—Seasonal.

C—Factors Influencing Localization of Industry.
- 1—Influence of early start.
- 2—Amount and kinds of labor.
- 3—Raw materials,
  - (*a*) Kinds.
  - (*b*) Bulky or high intrinsic value.
  - (*c*) Sources and available supplies.
- 4—Transportation facilities.
- 5—Nearness to markets for finished goods.
- 6—Power.

D—Elements of Cost.
- 1—Labor.
- 2—Raw materials.
- 3—Overhead.
- 4—Transportation.
- 5—Selling.
- 6—Value added by manufacture.

E—Marketing Product.
- 1—Selling method.
- 2—Advertising.
- 3—Methods of paying for finished goods.

F—Demand for Product.
- 1—Constancy.
  - (*a*) Influence of depression period.
    - (*x*) Necessity of life.
    - (*y*) Luxury.
- 2—Seasonal.
- 3—Size of market.
- 4—Influence by changes in style or other changes.
- 5—Competition.
  - (*a*) Actual.
  - (*b*) Potential.
  - (*c*) Substitution.

G—Possible Government Interference or Legislation.

H—Management.
- 1—Officers and directors.
- 2—Control over,
  - (*a*) Companies furnishing raw materials.
  - (*b*) Companies in similar lines of activity.
  - (*c*) Transportation.
  - (*d*) Distributing companies.
- 3—Agreements with other allied companies.
- 4—Life insurance.

I—Labor Problems.
- 1—Strikes and unions.
- 2—Profit sharing.
- 3—Loyalty.
- 4—Policy of effecting cooperation.

J—Balance Sheet Analysis.
- 1—Fixed assets.
  - (*a*) Land.
  - (*b*) Other tangible.
    - (1) Provision for repairs, depreciation.
    - (2) Condition of plant and equipment.
    - (3) Method of financing expansions and improvements.
      - (x) Sale of stock.
      - (y) Sale of bonds.
      - (z) Out of earnings.
    - (4) Fire insurance.
  - (*c*) Permanent investments.
    - (1) In subsidiaries.
      - (x) Stocks, bonds, advances.
    - (2) In other companies.
      - (x) Stocks, bonds.
    - (3) Value on books and market value.
      - (x) Reserves.

It is perfectly obvious that, in view of the great expenses unavoidably incurred in connection with the preliminary investigation and "shaping up" of a new piece of financing, no reputable banker could afford to handle very small security issues. Nor could the company itself support the heavy charges that would necessarily have to be made. For this very reason, if for no other, the average industrial company is too

- (4) Income from investments over period of years.
- (*d*) Treasury stock and bonds.
  - (1) Book and par value.
  - (2) Properly so called or simply unissued.
- (*e*) Intangible assets.
  - (1) Good-will.
  - (2) Patents, trade-marks, etc.

2—Current assets.
- (*a*) Cash.
- (*b*) Accounts receivable.
  - (1) Discounts.
  - (2) Reserve for bad debts.
- (*c*) Notes receivable.
- (*d*) Inventories.
  - (1) Basis of valuation—market, cost or selling price.
  - (2) Percentage of inventories to gross sales.
  - (3) Reserves.
- (*e*) Marketable securities.
  - (1) Reserve for decline in value
- (*f*) Accruals.
- (*g*) Total current assets.
  - (1) Proportion of current assets represented by cash.

3—Funds.
- (*a*) Sinking, insurance, pension, etc.
  - (1) Where and by whom kept.
  - (2) How used.

4—Deferred assets.
- (*a*) Prepaid items.
- (*b*) Organization, legal and moving expenses.
- (*c*) Discounts unextinguished.

5—Total assets.
- (*a*) Proportion of total assets represented by fixed assets.
- (*b*) Proportion of total assets represented by current assets.
- (*c*) Proportion of total assets represented by total surplus.

6—Capital stock.
- (*a*) Common and preferred.
  - (1) Par.
  - (2) Authorized and issued.
  - (3) For what issued.
  - (4) Preferred stock stipulations.
  - (5) Ratio of preferred to common stock.

7—Funded debt and notes.
- (*a*) Authorized and issued.
- (*b*) Rate of interest and time to run.
- (*c*) Purpose of issue.
- (*d*) Bond features.
- (*e*) Ratio of bonds and notes to stock.
- (*f*) Excess of property accounts over funded debt.

8—Current liabilities.
- (*a*) Accounts payable.
- (*b*) Notes and drafts payable.
- (*c*) Accruals.
- (*d*) Income and Excess Profits Taxes.
- (*e*) Total current liabilities.

9—Working capital.

10—Contingent liabilities.

11—Other reserves.
- (*a*) Contingencies.
- (*b*) Extensions and improvements, etc.

12—Surplus.
- (*a*) Profit and loss.
- (*b*) Capital.
- (*c*) Proportion of total surplus represented by cash.

K—Income Account.

1—Gross sales.
- (*a*) Turnover.
- (*b*) Percentage of gross sales represented by accounts and notes receivable.

2—Cost of goods sold.
- (*a*) Materials.
- (*b*) Labor.
- (*c*) Overhead including depreciation.

3—Selling and administrative expenses.

4—Total expenses.

5—Operating ratio.

6—Net profit on sales—income from operations.

7—Other income.
- (*a*) Sources.

8—Deductions from income.
- (*a*) Fixed charges.

9—Net income.

10—Margin of safety—factor of safety.

11—Available for dividends.

12—Rate earned on capital stock.

13—Rate of dividends paid on stock.

14—Stock dividends.

15—Percentage of net income (surplus) left in the business.

L—Financial Policy.

M—Conclusions.

small to resort to the investment house. The larger houses are rarely interested in an issue of less than $1,000,000, and they prefer to underwrite much greater amounts. As a matter of fact, it is scarcely possible for any company to induce a really reputable banker to sell an issue of less than $500,000, though local houses will occasionally go as low as $100,000. From the "market" point of view, also, a very small issue is undesirable because it may readily be subject to manipulation and violent fluctuations in price.

Frequently much misunderstanding has arisen among would-be borrowers or issuers of new securities because they have been turned away by the bankers, even though their financial condition was perfectly sound. Such refusal, however, is not due to the greedy manipulation of any so-called "money trust," but is based on the sound economic principle that after a certain point is reached in matters of this sort, the law of diminishing returns asserts itself with such insistence that the business is simply not worth transacting. Further, it is from the company's point of view extremely unwise for a small concern to burden itself with various types of obligations which may be widely distributed, for in this manner undue publicity may be given to its financial affairs.

It should be noted, also, that an unknown concern whose financial condition is satisfactory may have difficulty in enlisting the interest of bankers, while a better known, though less sound company might have no difficulty whatever in marketing its securities. In other words, it would sometimes appear that "credit" in such instances is based more on "reputation" than on character. However, this seeming paradox does not alter the truth of the situation that, in the long run, that company's credit is best which uses it least. Let us turn now to the second function of the "bond" house.

MARKETING THE SECURITIES

2. It is unnecessary in the present volume to discuss in any detail the method of distributing securities through the invest-

ment house. If an issue is large, one or more banking houses may act as "originators," either singly or jointly. They will agree to purchase the entire issue from the company at a stipulated price several points below the price at which the securities will be offered to the general purchaser. The original house will then in turn associate with itself several participating houses, who will take over the entire issue according to an agreed upon proportion at a somewhat higher price than was originally paid, and will then offer the issue to investors at a stipulated price. This method of distribution is termed a *syndicate* operation, and the principal house will frequently *underwrite* a security, that is, will guarantee the sale by agreeing to take back from the members of the syndicate any securities which they are unable to sell by a certain date. It must not be thought, however, that the foregoing illustration is necessarily typical of any particular sale of securities. On the contrary, there are certain differences in connection with practically every issue, which it is scarcely necessary to discuss in this place. The general method, however, has been indicated.

It is now customary for the "originating" house to buy the securities outright from the corporation, at the same time pledging them to the commercial bankers as security for a loan which puts the investment banker in funds to give his client. The amount which can be borrowed in this way on securities which are to be distributed will depend very much upon the character of the business as well as the type of security and the reputation of the investment house. Roughly, it may be said that probably no more than 75 per cent to 80 per cent of the par value could be borrowed on most stock issues, while as much as 90 per cent or even more may sometimes be borrowed on high-grade bonds as collateral. Naturally it is the purpose of the investment house to transfer its liability and make its profit as soon as possible. Hence, it frequently happens that the underwriting bank will merely lend its name to the transaction, letting the burden be carried by the various members of the syndicate which it forms.

Obviously a good deal of expense may be incurred in connection with the investigation preliminary to an issue of securi-

ties as well as in the actual process of distribution. High-grade bonds of a well-known concern may be put out with very little preliminary analysis, and may almost sell themselves. In such cases the actual spread between the price received by the borrowing company from the banker and the price at which the bonds are sold to the public may be very low indeed. Some government and municipal bonds may be sold on not more than a 1 per cent margin, namely, the banker might buy them at 99 and sell at 100, making only 1 per cent, or $10, on every $1,000 bond. Usually, however, there is a considerably higher spread, increasing from railroads to public utilities and finally to industrials. The better grades of bonds issued by industrial corporations will sell, depending upon circumstances, from four or five to perhaps seven or eight points higher than is received by the borrower. For example, the originating house might pay 94 or 95 for this type of security and sell it to members of the syndicate for 96 or 97. The latter, in turn, might offer them to the public at *par*. Lower grade bonds, debentures, and preferred stock are frequently subject to a greater "spread," while in the case of common stock the aggregate commissions to the different distributors may be as high as 10 per cent or even 15 per cent of *par*. These figures, of course, refer only to the practise of reputable investment houses which handle securities properly considered in the "investment" class, though with varying grades of desirability. The low-grade houses, or "brokers" of the promoting type, frequently take commissions ranging from 25 per cent to 50 per cent. However, keen competition in recent years has been reducing all commissions.

It can readily be seen that in the case of the better known companies, the investment banker may be practically sure of an immediate market for the securities, and the average banker would assure himself pretty definitely on this point before underwriting an issue. Frequently the distributing houses will know beforehand almost to a certainty where they can sell their portion of the securities, and can consequently distribute them immediately to their clients. However, this is not always the case. Sometimes the banker finds a large amount of securities left on his hands—much to his embarrassment. The writer re-

calls one recent case in which an issue of many million dollars in notes by a well-known hydro-electric company had to be "carried" by the banks in this way for several years before it could finally be distributed, owing to the generally adverse financial and business conditions. In the meantime, it was necessary for the investment bankers to become very permanent borrowers from the commercial banks in order to carry these "undigested" securities.

One should never assume, therefore, that an issue has necessarily been actually distributed to the public when the papers announce, through advertising, that such and such an issue has been sold and that the notice is for matter of record only. The issue may have been entirely "subscribed" beforehand by various retailing houses, and such notices help to make the security market more buoyant. Some issues are publicly reported as "oversubscribed" when, as a matter of fact, the "subscribers" asked for a larger amount of securities than they had any expectation of receiving in order that they might secure the actually desired allotment. Preference in such cases is ordinarily given to the smaller subscribers. Considerable time, however, may be needed in order to permit the security to be finally distributed among the ultimate investors, individuals, institutions, and so forth. In the meantime, the "market" may be suffering from a bad case of "undigested" securities, some of which may even prove "undigestible."

Anyone who watches market quotations carefully will note that many issues tend to sell highest shortly after they are put out. After a certain period of time, however, while the particular security is being "digested," and is "settling to its level," it will normally drop several points. In course of time the floating supply of a security, the proportion ordinarily available for market operations, is gradually decreased, and the better grades of stock and bond issues will find their way into the strong boxes of the investor, there to be held for considerable periods of time as an "investment." Insurance companies, savings banks, trust companies and similar institutions are frequently very heavy buyers of high-grade bonds, and their "investments" amount to several billions of dollars.

PROTECTING THE INVESTOR

3. Only passing notice need be given to the "protective" function of the investment banker. The fact that he has made a careful investigation of the financial condition of the company whose securities are offered to the investor, is in itself very significant. If the proper sort of an investment house is back of the issue, and has had sufficient confidence to buy it outright and to take a chance on distributing the securities in due course, it is a fairly dependable guaranty that the securities are sound. At any rate the banking house is usually very jealous of its reputation and does not care to sponsor a doubtful issue. The buyer, therefore, can be reasonably certain that the bankers are acting in good faith, and that his interests will be protected in the future. Further, many investment houses endeavor to "make a market" for the securities which they sell by offering to buy back, at a slightly lower rate than the selling price, any security which may be turned back to them by individual holders. This policy will tend to stabilize the price and to insure confidence. It will also give the added feature of ready "marketability" to unlisted securities.

Finally, the reputable banker will further protect his clients and any holders of the securities, by carefully watching the affairs of the issuing company, and, if financial difficulties arise, will in the usual case see that proper legal protection is afforded to the investor. Some bankers have been so jealous of their reputation that they have even been known to pay out of their own resources interest on bonds which had been defaulted by the borrower. The writer recalls one well-known and very conservative eastern house, of which it is commonly said that the management constantly sacrifices its own interests to those of the investor—not a bad testimonial.

From the foregoing statements, however, it must not be inferred that implicit confidence can be placed in all security issues which are put out by investment bankers. On the contrary, there are unfortunately many so-called "banking houses" whose chief desire appears to be to make as much money as possible for themselves, without any particular regard to the

welfare of the buyer of their securities. It is absolutely essential for the purchaser to assure himself of the character of the issuing house before committing himself. The local savings bank or commercial bank can usually give satisfactory information on this point. Unless the investor is able to do some independent thinking for himself, he should constantly consult his personal banker in these matters. Nor should it be supposed that all of the security issues put out by the best investment houses are necessarily *always* good investments. A certain amount of risk is inevitably incurred in connection with practically all industrial issues, and to a large extent even in public utility and railroad issues. All that can be asked of the investment house is to exercise its best judgment, and then attempt to protect the purchaser in the future. It should be noted in this connection, that every reputable house puts on its offering circular and "prospectus" a note to the effect that "the information herein contained is not guaranteed by us, but has been secured from sources which we deem reliable, and upon which we have acted in purchasing this security."

THE EDUCATIVE FUNCTION

Closely related to the foregoing function of the security house, is what may be termed the *educative* function. The investment banker is in a peculiar position to encourage or discourage certain types of enterprise. As has been already indicated, he serves as a middleman who brings together investment capital and the enterprise deserving encouragement. In this capacity he is in a position greatly to influence public opinion as to the desirability of certain forms of industry, and to instruct them as to what is considered sound business practise.

The duty of the investment house, however, does not stop at this point. The wider the interest shown by the public in investment securities, the more numerous is the host of fraudulent or semi-fraudulent banking houses. The promoter and speculator have in recent years thrived immeasurably because of the slight knowledge which the average man gained of bond

buying, as a result of the numerous government issues put out during the war period and immediately thereafter. Having once formed the habit of buying these intangible pieces of property, the investor—and there are now almost twenty million potential investors in the United States—is frequently easily interested in other types of securities. As the price of Liberty bonds dropped, he became an easy prey to the swindler, who would promise much larger returns on some worthless "investment."

The greater the volume of legitimate security sales, the more numerous grows the army of imitators. Their methods need not be discussed in this connection. Suffice it to say, however, that the investor is frequently deceived, positively, by misstatements regarding fairly good securities, and, negatively, by the failure on the part of the seller to give him adequate information regarding the securities offered. Near-truths and the concealment of unfavorable information are merely a species of fraud which does not ordinarily bring the selling house into the clutches of the law. Then there is, of course, the innumerable class of wholly fraudulent securities, in selling which the promoting house merely plays upon the imagination of the buyer. The field for deceit and injury is limitless. It is, therefore, one of the very important functions of the legitimate investment house to educate, not only its clients, but the public in general regarding the essential qualities of a sound investment, and in season and out of season to expose fraudulent practises.

THE INVESTMENT BANKER AS BUSINESS ADVISER

4. Perhaps one of the most significant, though least noticed, functions of the investment banker is that which he exercises or can exercise in his advisory capacity. For weal or woe, his influence and counsel may have great weight not only with the actual borrower but also with the would-be borrower. A banking house which has a proper sense of its responsibility can without much effort on its part give wholesome advice to the companies which it refuses to finance. They can be told clearly

the weakness in their present methods, from the investor's point of view, and can frequently be warned against practises which might later prove disastrous.

When it is recalled that probably one hundred *possible* borrowers are turned away to one *actual* borrower, the opportunity to be of real service in this manner is sufficiently obvious. Some may object that it is not the banker's function to do volunteer "missionary" work of this sort; but, as long as it costs him practically nothing, this casting of bread upon the waters will probably return very high dividends in the future. The writer knows of some bankers who feel such a real responsibility in this connection that they frequently advise borrowers whose securities might very readily be sold that it is better to finance themselves in some other manner. This may mean immediate loss of income to the banking house, but should be productive of much profitable good-will for the future.

The bank can further be of distinct service to those who actually borrow by educating them along sound financial lines. At the door of the investment banker must be laid primarily the blame for having caused the investor to feel that industrial stocks, as opposed to bonds, cannot be of an investment nature. Most companies naturally wish to borrow instead of raising additional capital by issuing stock. It is usually *easier* to do this, and it has usually been *easier* for the investment house to sell notes and bonds. However, it should be the duty of the banking fraternity to explain clearly to industrial companies that it is not only desirable but perfectly possible to expand solely through stock issues—even *common* stock issues.

The building up of senior obligations, and the utilization of long time credit by "industrial" corporations has been undoubtedly productive of much economic loss. As has earlier been mentioned, the utilization of "credit" in this way creates no more capital; it merely takes the place of capital for a time, and brings in its wake huge risks which the average industrial enterprise, because of its uncertain future, should never take. What seems to be an immediate gain, although of a very minor sort, usually turns out to be an ultimate loss. While the common stockholders think that their immediate dividends are be-

ing increased by the issue of preferred stock or funded obligations, the usual experience is that as the business cycle moves they will simply be deprived of dividends which they might otherwise have received. Unstability results, and the long run returns to the owner are less than would otherwise have been the case. Investment bankers can do much, if they will, to disseminate sound doctrine along these lines, so that even the common stock of many types of corporations may become a perfectly safe "investment."

This particular function of the banker extends in both directions—to the company and to the investor. While it is true that investment "fads" frequently dictate the type of security which can be sold, it is no less true that the united action of investment bankers could popularize almost any type of security. They can educate investors as well as borrowers.

As an example of what can be done along such lines may be cited the introduction of the so-called "baby bonds." There was a time when practically no bond of a denomination lower than $1,000 was issued. At present, however, many of the larger industrial borrowers are issuing $500 and $100 bonds, with a view to securing a wide distribution among small investors. This may or may not be a wise policy, and the opinions of investment houses themselves differ as to the wisdom of the policy. However, the movement was popularized by certain types of investment houses.

The writer, himself, tends to the view that such small issues are wasteful and wholly unnecessary in view of the fact that the country is so well supplied with savings banks which pay a reasonable rate of interest. It is a question whether there is any gain for a small saver, who has not accumulated so much as a thousand dollars, to become a buyer of securities. He thereby runs many risks, and frequently becomes a prey to dealers in "low grade" securities. It is very probable that, from the economic point of view, there might be a distinct gain if no investment in corporate securities could be made for a less amount than $1,000. Probably if the better investment houses could have their way, this "baby bond" practise might be done away with.

The suggestions made, however, point toward more concentration in the investment banking business, and hence more effective control of the financial situation. This is not a popular slogan in the United States, but surely the enormous rate of increase of so-called investment banking houses has been a most unwarranted one. It has made new and reckless financing entirely too easy; the country has gone almost security-mad. The hundreds of post-war failures of "imitation" investment houses should furnish sufficient evidence on this subject. Needless to say, it is probable that no rationally managed investment banking house could ever fail. Yet only a few years ago, at a time when the security market was very active, one of the well-known New York houses failed, with reported liabilities exceeding its assets by several millions of dollars. Many less known "near" banking houses have since that time gone bankrupt. Beyond a question there has been far too much competition in the investment banking business, much to the detriment of borrowers, investors and the banks themselves.

Again, the investment house can through its intimate connection with the companies which it finances give helpful counsel as to the general methods of operating the business, from the *financial* point of view. This does not at all mean that the banker should try to run the industry, or should attempt to interfere in its more technical aspects. It does mean, however, that it is distinctly the banker's function to see that the business is properly coordinated in all its parts through a central financial control. This connotes careful planning and a definite program of expansion or development, so that expenditures will be made at a time when and in a manner which the company will find most advantageous. The banker is in a position to understand the general business situation without those illusions which might ordinarily beset the business man. Further, he is in a position to study every industry comparatively. That is his chief business. Accordingly, he can learn much that will be of great value to the companies with which he has dealings, and can at all times give constructive advice of a most helpful sort.

INVESTMENT BANKER CONTROL

Very interesting and sometimes rather bitter discussions center around the question of so-called "investment banker control" of business corporations. Due to the great size of the modern industrial unit, it is unavoidable that financial power must be more or less centralized in certain hands. Small bankers would be wholly unable to finance some of the bigger deals. However, as was above indicated, in the general field and for the average concern which is large enough to raise capital on the public market, the competition of investment bankers is so keen that there can be no rational complaint whatever about the situation.

On the other hand, this much is true, and being true, reflects somewhat on the quality of service rendered by bankers to the companies which they have financed. Frequently they have acted like old-school doctors, proposing strong remedies for the financial diseases of their patients after they have permitted them to become ill. Their real function should be to act as doctors of "preventive" medicine, whose function will be, in an advisory capacity, to ward off financial difficulties, rather than merely to attempt to adjust them when it is too late. The carrying out of this policy, it may be contended, might lead to a curtailment of the business of the investment banking house. The answer is that it would undoubtedly lead to a smaller amount of "distress" financing, but would, on the other hand, result in many more common stock issues. Further, if the function were properly performed, industrial concerns might find that it would be well worth their while to pay certain annual fees to investment bankers who are in a position to give wholesome advice.

In this connection, passing attention should be called to a popular misapprehension. In recent years, when such concerns as the Goodyear Tire and Rubber Company, the General Motors Corporation, or the Standard Parts Company were forced to readjust capitalization on very onerous terms, and when the old management was evicted, it has been the popular thing to hurl epithets at the financial interests which have ef-

fected a reorganization. The common clamor has it that the bankers got control and "kicked out" the men who made possible the growth of a great business, solely with a view to enriching themselves (the bankers). Such charges scarcely need be answered. It should be stated, however, that in such instances the bankers could only save a situation made intolerable through lack of proper financial control, by replacing the old management and thoroughly revising the methods of conducting the business. When concerns have to be saved by such "rescue party" methods, it is not strange that borrowed money comes high, and that many restrictive provisions must be imposed on the owners of the company, whose "joy ride" has ended with their downfall. In these days of intense competition, business success depends upon more fundamental qualities than mere "salesmanship."

Certain investment bankers insist that a member or representative of their firm shall be on the board of directors of the companies which they finance, while others take a wholly opposite point of view. It is, however, at the present time very common for the larger investment houses to follow this policy. This does not at all mean that the investment house "controls" the company which it has financed. One director cannot sway the decisions. But he may act as a watch-dog to protect the investor's interests, and will naturally be in a position to give wise counsel to the business in financial matters. He can also see to it that the various obligations assumed by the company will be properly met. This policy, therefore, instead of being inconsistent, is wholly consistent with sound banking principles, and can be of great advantage to all parties concerned, the company itself, the banking house, and the buyer of securities.

It may not be amiss to call attention specifically to the fact that the type of security issue put out or the circumstances under which the issue has been made will frequently in itself determine whether or not it is advisable for the investment banking house to be represented on the directorate of the newly financed concern. A bank which specializes in stock issues put out as investments, or in reorganizations leading to new financing, should probably be represented on directorates in the in-

terests of security holders. On the other hand, a more conservative bank specializing in the highest class of mortgage bonds gains little if anything by such representation. Such a policy may, under these circumstances, be neither necessary nor expedient.

It should also be noted that a commercial bank, which presumably is supplying only temporary funds to be liquidated out of current assets as goods are sold and receivables are paid, has no valid claim for desiring representation in the management of a company to which it lends money. In fact, there is frequently danger that when the officers of a commercial bank are also officers of the borrowing concern, too liberal a credit policy may be followed notwithstanding the occasional legal checks imposed on lending of this sort. Such connections may prove highly advantageous in many instances, yet there is the constant danger that the judgment of the lender may be clouded. Of course, there are times when, due to the financial difficulties of the borrower, a commercial bank finds it necessary to extend its loans over a considerable period of time. Under such circumstances, representation on the directorate may be not only highly desirable but absolutely essential. This, however, is the exception which does not prove the rule. There is a vast difference in this respect between the commercial and the investment bank which must ride with the financed concern over a long period of time, during which securities might "go bad" in the hands of purchasers unless the business were carefully watched.

Yet there are possible dangers resulting from an overdevelopment of this practise. When the banker himself keeps a large block of securities, so that he becomes one of the chief creditors or owners, as sometimes happens, then the banking house may *really* control the situation or at any rate wield a very potent influence. This may put the banker in a rather anomalous situation. He may perhaps tend to forget his disinterested duty to the investor as a result of his own financial interests in the business itself. While not necessarily the case, a conflict of interests might conceivably arise which would

cause the banker to see the affairs of the company too much from the point of its management and not enough from the point of view of an unprejudiced observer.

It is further true that the attitude of the investment banker can rarely be that of a captain of industry. His mind is analytical and critical, tending to be pessimistic, while that of the successful business man tends to be more constructive and optimistic. The investment banker is frequently needed in a company in an advisory capacity, whereas he might utterly hamper its operations were he in direct control. Sometimes large investment banking houses, having secured control of a business, through the company's financial reverses or otherwise, have put the active management in the hands of engineers, who, while excellent in their own line and well suited to certain types of work, may yet be wholly unfit for the actual conduct of an industrial enterprise. The engineer's mind tends to be too mathematical, too circumscribed by formulae, and too inconsiderate of the more *human* aspect of business administration.

From various points of view, therefore, it is as a rule unwise for the investment banker to be in actual control of those enterprises which he finances. His greatest value lies in his *advisory* capacity, as a disinterested observer and student of industrial conditions. "Each man according to his trade," is still an excellent motto.

ADVANTAGES GAINED BY SELLING SECURITIES THROUGH THE INVESTMENT BANKER

After this somewhat extended discussion, it may be well for the reader's benefit to sum up briefly without further comment the chief advantages to be gained by selling securities through the investment banker rather than by the company itself. Among these advantages may be mentioned the following:

1. The company can be reasonably sure of securing new funds when needed.

2. The banker will be in a position to advise as to the best form of securities to issue at the particular time.

3. For concerns which are of sufficient size to borrow in large amounts, it is probable that in most cases the expenses of selling the securities will be less if the business is handled by the banker.

4. It is further probable that better and more favorable interest rates can be secured by the banker, who is thoroughly familiar with the money market situation and the demands of customers.

5. Wider distribution of the security can probably be attained by the investment house than by the company itself. The very fact that the issue is being put out by the investment house rather than by the company tends to make a market for the security. There is frequently a feeling that a company which attempts to market its own securities is probably not of sufficient financial strength to obtain the backing of a reputable investment banker.

6. From the investor's point of view, the security will probably be more desirable, both because of the assurance of careful preliminary investigation and because the banker frequently "makes a market" for the new issue. Also, it is significant that the banking house will "watch" the security and presumably keep the interests of the investor uppermost.

7. The company, in turn, will not only have saved the energy of its officials, but will also be in a position to gain much from the constructive advice which can be from time to time offered by the banker.

Blue Sky Legislation

One of the interesting recent developments in legislation which is of very direct concern to every newly organized company is the increasing number of so-called *blue sky laws* enacted by the various states within the last 15 years. The first of these laws was passed by the state of Kansas in 1911, and at a recent date only six states, Colorado, Connecticut, Delaware, Nevada, Pennsylvania, and Washington, were without their blue sky laws.

All of these "blue sky" laws are more or less similar in essential respects. Their purpose is primarily to prevent the issue and sale of fraudulent securities. In order to accomplish this end they make it necessary for dealers in securities to obtain licenses from the properly constituted state authorities before they can lawfully market their securities. The law applies to the company which issues as well as to the broker who sells.

A good deal of detailed information regarding the corporation is required by state officials in this connection, and a fee must always be paid based upon the amount offered for sale in the state. Presumably the securities commission, public service commission, or other body whose function it is, will analyze the detailed information as to the character, property, business, and capitalization of the company with a view to determining whether the sale of the securities would result in the perpetration of a fraud upon the purchaser. Certain types of securities are, of course, exempted from the provisions of the law. Among these are included government securities of different types, the stock of banks and insurance companies which are subject to definite regulation, usually public utility securities, the issue of which is regulated by public service commissions, securities which have already been listed on a stock exchange and thus approved by a responsible body, and the first mortgage bonds or other senior securities of companies whose stock is listed or has been already passed upon by the state authorities.

The restrictions, stipulations and penalties imposed by the various blue sky laws need not detain us. Suffice it to say that in spite of a wide popular opinion to the contrary, the mere fact that an issue has been approved or disapproved by an overburdened state commission does not by any means guarantee the economic fitness or future profits of the company whose securities are sold. Further, because of the delays and red tape involved, a perfectly worthy concern may be prevented from selling its stock in a given state, to the detriment both of the issuer and the possible investor.

Nor do these laws prevent a swindler within the state from peddling his worthless stock to customers living in another

state which may be without the supposed protection of a blue sky law. The inequities and abuses, however admirable the purpose, are very flagrant. The state of Kansas, which is the pioneer in blue sky legislation, has been and is the home of a number of egregious swindling operations which victimize innocent investors living outside the state, or which seem to evade the technical provisions of the law by assuming the form of voluntary associations instead of incorporating under a state charter. Similarly, one of the most astounding and shameless frauds perpetrated within recent years has until very recently been flourishing almost within the shadow of the Massachusetts State House, selling its certificates of ownership in a voluntary association widely throughout the state and nation.

Obviously, because of the interstate character of security issues and sales, it is desirable that the Federal Government exercise some controlling or unifying influence in the matter. State laws frequently lead merely to confusion and hamper the sale of a lawful security. It would scarcely be feasible, however, in a country so large as the United States to have the administration of this matter left solely in federal hands unless the details could be carried out by the several states. A federal *blue sky* bill, the Denison Bill, was several years ago passed by the lower house of Congress, but did not become a law. Its purpose was to give federal assistance to the operation of state blue sky laws already passed, by preventing the use of the United States mails and other agencies of interstate commerce for transporting, or for promoting, or for procuring the sale of securities contrary to the laws of the states. In other words, it aimed to make more effective the already existing legislation. Every state preserves the right to adopt such a policy as in its judgment might seem desirable with reference to intra-state actions. *(See page 771 for British laws.)*

How effective these laws may become is still an open question. Any intelligently enforced legislation on this subject is decidedly a step in the right direction, inasmuch as it may serve to eliminate some of the worthless or wholly undesirable corporations which have hitherto been so readily financed. The National Better Business Bureau in recent years has ably supplemented the somewhat inadequate laws.

CHAPTER XI

BUSINESS FINANCE AND THE STOCK MARKET

General information regarding the Stock Exchange—Relative importance of listed and unlisted securities—Most securities are not listed—Requirements for listing securities—Advantages gained through listing securities—Distribution of ownership of industrial securities—Dangers and disadvantages of the Stock Exchange—Speculation and its methods—Low-grade brokers and bucket shops.

MUCH attention has from time to time been given to the alleged significance of the stock exchange in facilitating the growth of business corporations. The assertion has frequently been made that, without an organized stock exchange, modern industrial development would be quite impossible. However, it is not possible in this connection to discuss in detail the history and methods of the stock exchange. On the contrary, attention will be directed in the briefest manner to the general significance of an organized security market, from the point of view of the average industrial concern. Data will also be submitted to show that the industrial significance of the stock exchange has probably been by most writers considerably exaggerated.

In the first place, a few words of general information should be given regarding the stock exchange as an institution. In popular parlance, when the "Exchange" is referred to, everyone has in mind the Wall Street Stock Exchange, of New York City, whose transactions so greatly outnumber those of all other exchanges in this country that they cannot in any way be compared with "the big Exchange." As a matter of fact, there is in New York City itself one other very important exchange, the Curb Exchange, which is the home of "unlisted" securities. There are also stock exchanges in practically every large city of the country, and each of these cities has its "curb"

exchange where unlisted and speculative issues are traded in. The chief European cities are also supplied with stock exchanges, the largest and most important in the world being the London Stock Exchange.

The Wall Street Exchange is a voluntary association, first organized more than a hundred years ago, and having a present membership of 1,100, only a portion of whom are active members. On February 7, 1929, by vote of present members, the number of seats was increased by 275 to 1,375. To be a member of the exchange, one must have a "seat" on the exchange, that is, he must be admitted to the association, having been passed upon by the membership committee. A "seat" on the exchange, or right to trade thereon as a member, has a distinct market value, varying from time to time in accordance with general financial and business conditions. To date the record high price for a "seat" on the Exchange was $625,000 in January, 1929, and one year earlier the price was only $290,000. In 1914, during the panic created by the European War, a seat was sold for $37,000. Recent sales have been at the highest point on record.

The membership is composed chiefly of individual brokers, and brokerage or investment banking houses, usually represented by one member of the firm. According to the rules of the Exchange, no incorporated concern is eligible for membership. The membership of the New York Curb, which is now organized and operates in a building instead of on the street, was 1,106 in 1928.[1] The Wall Street Exchange is managed by a governing committee of 40 members, assisted by 13 standing committees.[2] It exercises strict disciplinary powers over its

[1] The Curb Exchange provides a market not only for the more speculative securities, but also for the securities of many corporations which do not care to list their issues on the Wall Street Exchange. Also, it furnishes a temporary market for the securities of new corporations until such time as they can meet the listing requirements of the large Exchange. At the beginning of 1929, 2,351 different securities were listed, 1,835 stocks and 516 bonds, and transactions in 1928 were about 236,000,000 shares, and $835,000,000 in bonds. The record transaction for one day was more than 3,000,000 shares on November 28, 1928, and the highest price for a seat $175,000 late in 1928.

[2] These standing committees are as follows:

Admissions	Conference	Odd Lots and Specialists	Quotations and Commissions
Arbitration	Constitution	Publicity	Securities
Arrangements	Finance		Stock List
Business Conduct	Law		

membership in a manner which would be impossible were the Exchange incorporated.

A study of Table 18 will throw a good deal of light on the scope and significance of the stock exchange. In the first place, it is evident that at the present time about 22 per cent of the market value of securities listed on the Wall Street Exchange is in the form of domestic or foreign government bonds of some type (including municipal and state issues). This leaves a total of $67,340,000,000 market value of listed corporation securities. Further analysis, also, shows that in 1928 probably not much more than 50 per cent of the total, or around $35,000,000,000 market value, consisted of the securities of industrial or allied companies, the balance being in securities of railroad and public utility companies.

A comparison of the listed industrial and miscellaneous securities with a fair estimate of the par value of the outstanding securities of all industrial and miscellaneous companies, public utilities excluded, indicates that probably not much more than one-third of the total "capitalization" is listed on the New York Exchange, or on any reputable exchange for that matter. It is well to bear in mind this relative proportion existing between listed and unlisted industrial securities when sweeping assertions are made regarding the absolute necessity of the stock exchange as a vehicle for facilitating the growth of corporate enterprise. The relative volume of *industrial bonds* listed in 1921 was small, being little more than one-seventh of all listed corporation bonds. The proportion is probably one-sixth at present. Further careful estimates indicate that of the outstanding securities of all industrial and miscellaneous corporations, not more than 12 per cent to 15 per cent, or from $12,000,000,000 to $15,000,000,000, is in the form of bonds and notes. It should also be borne in mind that many companies list only certain portions of their capitalization, usually only their common stock issues, fewer list preferred issues, and a still smaller number their bond issues.

The average market price per listed stock issue at the end of 1927 was about $45,000,000, while the average par value for bond issues listed was about $14,500,000. Very few issues

TABLE 18

Data Regarding Securities Listed on the New York Stock Exchange[1]

Stocks

Number of Stock issues listed, January 1, 1929 (estimated)	1,177
Number of Shares of stock listed, January 1, 1929 (estimated)	757,302,000
Average number of Shares per issue	643,000
Market value of all shares listed, January 1, 1929	$67,472,000,000
Average market price per share	$89
Average market price per issue	$57,300,000
Number of stock issues listed, January 1, 1928	1,097
Number of shares of stock listed, January 1, 1928	654,999,000
Average number of shares per issue	600,000
Market value of all shares listed, January 1, 1928	$49,736,351,000
Average market price per share	$75.93
Average market price per issue	$45,300,000
Number of par issues, January 1, 1928	698
Number of par shares	368,046,000
Market value of par shares	$32,886,491,000
Number of No-par issues, January 1, 1928	399
Number of No-par shares, January 1, 1928	286,953,000
Per cent of all shares listed (Estimated at 50% in 1929)	43.8%
Market value of No-par issues, January 1, 1928	$16,850,000,000
Average market price per share—	
Par stock	$89 35
No-par stock	$58.71
Number of railroad issues, January 1, 1928	174
Number of shares listed	85,538,000
Market value of railroad issues, January 1, 1928	$9,132,112,000
Average market price per share	$106.76
Number of industrial and miscellaneous issues, including 119 public utilities, January 1, 1928	923
Number of shares listed	569,461,000
Market value of industrial and miscellaneous shares	$40,604,000,000
Average market price per share	$71.30
"Fair Value" of all corporate stock (U. S. Treasury estimate for tax purposes), 1925	$95,150,000,000
Number of Shares Sold:	
1928 (estimated)	920,550,000
1927	576,991,000
1926	449,103,000
1925	452,211,000
1924 (estimated)	282,000,000
Largest number of separate issues traded in one day (March 26, 1929)	838
Heaviest day's trading, March 26, 1929 (No. of shares)	8,246,740
Heaviest week's trading, ending November 17, 1928 (No. of shares)	31,061,000
Heaviest month's trading, November, 1928 (No. of shares)	115,434,000
Yearly stock listings:	
1928	$4,352,000,000
1927	$3,409,000,000
1926	$3,711,000,000
1925	$2,701,000,000
1924	$1,932,000,000

Bonds

Number of bond issues listed (including governments), January 1, 1929 (estimated)	1,534
Number of *corporate* bond issues listed, January 1, 1928	1,251
Total par value of corporate bonds listed	$18,160,000,000
Total market price	$17,604,000,000

[1] Much of the data on which this table is based are derived from the *Annual Report of the President* of the New York Stock Exchange.

Average market price	$96.93
Average par value per issue	$14,500,000
Number of railroad issues, January 1, 1928	740
Total par value of railroad issues	$10,770,000,000
Average market price	$95.58
Number of Industrial and Miscellaneous bond issues, January 1, 1928	511
Total par value of the same	$7,390,000,000
Average market price	$98.91
Par value of corporate bonds sold (estimated):	
1927	$2,150,000,000
1926	$2,012,000,000
1925	$2,339,000,000
1924	$2,308,000,000
Par value of corporate bond listings:	
1928	$1,838,000,000
1927	$2,852,000,000
1926	$1,092,000,000
1925	$1,576,000,000
1924	$1,040,000,000
Government bonds, etc.:	
Number of governments and public bodies	96
Number of separate issues	240
Par value of all issues	$18,721,500,000
Market value of all issues	$19,271,000,000
Par value of Government bond listings:	
1928	$1,139,000,000
1927	$1,098,000,000
1926	$1,108,000,000
1925	$ 607,700,000
1924	$ 788,700,000
Total par value of all bonds listed, January 1, 1928	$36,881,330,000
1929	$48,588,550,000
Total bond sales:	
1928	$2,940,000,000
1927	$3,322,000,000
1926	$3,030,000,000
1925	$3,398,000,000
1924	$3,825,000,000

Totals and Comparisons

Number of Companies with bonds and (or) stock listed, January 1, 1928	1,164
Number of separate issues listed (bonds and stocks)	2,348
Market value of all corporate securities listed, January 1, 1928	$67,340,000,000
Average market price per company	$57,900,000
Number of Railroad Companies with listings (914 issues)	346
Number of Public Utility Companies with listings (327 issues)	161
Number of Industrial and Miscellaneous Companies with listings (1,107 issues)	657
Total market value of all railroad securities listed	$19,426,000,000
Average per railroad company	$56,100,000
Total market value of Industrial and Miscellaneous securities (including public utilities)	$47,914,000,000
Average per company	$58,600,000
Number of Corporations in the United States, 1926	455,320
(Estimated number of corporations, January 1, 1928	500,000)
Estimated par value, or nominal value, of all corporate securities in the United States, 1926, at least	$135,000,000,000
Total par value of securities reported by 359,449 corporations in 1926	$106,464,000,000
Average per corporation	$300,000
Grand Total, all securities listed on Wall Street Exchange, January 1, 1928:	
Number of issues	2,588
(Number of issues, January 1, 1929	2,711)
Market value	$86,611,000,000
(Market value, January 1, 1929	$114,851,000,000)

under $5,000,000 are listed. The average market value per *company* for *all* securities was around $58,000,000 in 1928.

Inspection of figures given in Table 3 (p. 24) shows that in 1919 there were in the United States 371 corporations having an "invested capital" in excess of $20,000,000; 789 with invested capital above $10,000,000; and 1,754 with capital in excess of $5,000,000. These data are very significant for purposes of comparison since *altogether* only 1,164 companies are "listed" on the Exchange. It further appears that of all industrial and miscellaneous companies in the United States, less than three-tenths of one per cent, in number, have their securities listed on the New York Stock Exchange. There are, however, more than 1,000 companies whose securities, amounting to several billion dollars, are listed on the New York Curb Exchange. Among these "Curb" listings are a large number of no par stocks.

Again, it is interesting to observe that on the average the entire number of shares listed on the Exchange is turned over about once per year. In an active year, such as 1919, the turnover was nearly 150 per cent, and in 1928 about 130 per cent. However, it must not be thought that the average company's stock is "in the market" to this extent. After an issue has been "seasoned," frequently the larger proportion is held by individuals and institutions for semi-investment purposes and is not in the hands of brokers to any extent. In fact, the "floating" supply of many of the large issues is surprisingly small. At the end of March, 1929, for example, it is estimated that 76.3 per cent of the common stock (5,430,733 shares) of the United States Steel Corporation and 93.7 per cent of the preferred stock (3,376,127 shares) were "off the market" and in the hands of individual owners. Sometimes a very "active" stock will be turned over many times during the year; the total number of shares sold will be as much as 10, 15, or even 20 times the total number listed.

REQUIREMENTS FOR LISTING SECURITIES

The mere fact that a security is "listed" on the Exchange is no guaranty whatever that it is a safe investment. However,

before indicating the general arguments for and against listing securities, perhaps brief attention should be given to the "listing" requirements of the New York Stock Exchange. To "list" merely means to admit a stock to the right of being traded in on the Exchange. A Stock List Committee of six is appointed by the Governing Committee of the Exchange to pass on the applications to "list" which are made by the corporation. This committee is largely guided in its action by specific rules adopted by the association. It is also necessary for the company wishing to list its securities to enclose with its application $120 for each $1,000,000 or portion thereof of each class of security, and the same amount for each block of 10,000 shares have no par value or a par value less than 100. In connection with the application a vast amount of information must be given, covering such points as the following:[1]

1. All the information ordinarily contained in the charter of the corporation.

[1] The following "APPLICATION TO LIST" is used by the Boston Stock Exchange. In essential features it is not much different from the form used by the Wall Street Exchange. (See Appendix, pp. 789-803.)

BOSTON STOCK EXCHANGE
STOCKS
STATEMENT OF

.... Co.

....

Date of Application, ...

The listing Committee will meet on the first Tuesday in every month at 3:15 p. m.

An application signed by the President and the Secretary of the Corporation must be filed with the Secretary of the Stock Exchange on or before the Tuesday prior to the date set for consideration.

Every original application for listing securities must be accompanied by a check for the amount of $250 for $5,000,000 or any portion thereof, of the par value of securities presented for listing; $50 more for each additional $1,000,000 or portion thereof up to $10,000,000 inclusive. For listing additional amounts $25 for each additional $1,000,000 or portion thereof. Said check should be drawn to the order of the Treasurer of the Boston Stock Exchange and will immediately become the property of the Exchange.

* * *

It is required that a sample of each issue of Stocks or Bonds sought to be listed shall be referred to the Committee for acceptance as to form, character, and workmanship, prior to application for their listing; no form of Stock Certificate or Bond will be accepted unless it has been carefully engraved by some Bank-Note Engraving Company whose work the Committee on Stock List has been authorized by the Governing Committee to accept for admission to the list. *(Footnote continued on next page)*

2. A full financial history of the corporation, together with recent balance sheets and income statements.

3. An indication of the purpose of the issue in question, and the proposed application of the proceeds.

4. A general statement of the company's financial relations with affiliated or subsidiary concerns, together with the nature of its liabilities of different sorts.

5. The application must also be accompanied by a large number of corporate papers, including particularly copies of the charter and by-laws, together with legal papers authorizing the proposed issue.

APPLICATION TO LIST STOCKS

Statement of Company

1. Name of Company?..
2. Purpose for which organized?

....

....

3. Date of incorporation?..
4. Under what state laws incorporated? If under special legislative act give date of same; also give references to any special legislation affecting the Corporation.

....

5. Amount of authorized Capital Stock,	Common?	....
	Preferred?	....
6. Amount of Capital issued,	Common?	....
	Preferred?	....
7. Amount to be listed under this application,	Common?	.........shares
	Preferred?	.........shares
8. Amount unissued, for what purpose reserved, and options or contracts on such shares,	Common?	.........shares
	Preferred?	.........shares

....

....

9. Par Value of Shares?..
10. Amount paid in on each Share, and in what manner paid (stating amount of Stock paid for the property); if an additional issue state application of proceeds?..

....

....

6. A report of a qualified engineer, covering the actual physical condition of the property at a recent date, is also required.

Additional information must accompany the applications from corporations owning or operating mines or oil and gas wells. Nor do the requirements end here. The company must subscribe to certain "agreements" which are made a part of the application. Among these may be mentioned:

11. Is Stock Assessable?..
12. Dividend Record? ....
13. Is any of this Stock pooled or held in trust or in escrow? Full particulars required. Voting power? Whether personal liability attaches to ownership? Cumulative or non-cumulative, preferences as to dividends, distribution of assets and retirement?......................
....
....
14. Location of Principal Office?....................................
15. Location of Transfer Office, and name of Transfer Agent?............
....
16. Place of Registration?..
17. Names of Officers?..
....
18. Names of Directors and Tenure of Office?..........................
....
19. Date and Place of Annual Meeting; end of Fiscal Year?..............
20. If Mining Company, state location and proximity to railway or other common carrier; what amount has been expended on surface and what amount has been expended underground; what is the capacity of Mining, Milling and all other Machinery?....................
....
21. Remarks to cover any other point not specified above?..............
....
....

PAPERS WANTED

Each exhibit shall be separately made up and marked with the proper letter, and be enclosed in envelope marked with corresponding letter.

All certifications made by a Notary Public (whose commission shall be certified by the Secretary of State) must state that he has compared the copy with original and that it is correct.

All Mining Companies must furnish Deeds, or certified copies thereof; also original or certified copy of Expert's Report as to present value and development of property.

EXHIBIT

A. Description and location of property, with map, if any.
B. Last report of Company's Treasurer or Directors.
C. Copy of Charter, or Articles of Incorporation, certified by Secretary of State where incorporated.

(Footnote continued on next page)

1. The company must maintain a transfer house and a registry office in the Borough of Manhattan in the City of New York, and these two must be separate institutions.

2. The form of certificates, engraving, and the like must conform to the careful rules laid down by the stock exchange for the protection of the security holder against counterfeiting.

3. Prompt notice must be given both to the stock exchange and to the security holder about any action taken by the com-

D. Copy of By-Laws attested by Secretary of Clerk of Corporation sealed with seal of Company.
E. Certified copy of Court Records, if any, and when required copies of Deeds, certified by Register of Deeds.
F. Detailed statement of present Financial Condition of Company (showing Debts and Resources), certified by a duly authorized Public Accountant.
G. Number of Shareholders in each class of stock, classified as per enclosed schedule.
H. Letter from Transfer Agent accepting office.
I. Letter from Registrar accepting office.
J. Letter from Counsel (not an Officer or Director of the Corporation), *in re* legality of incorporation and authorization and issue of securities.
K. Copy of Stock Certificate (cancelled).
L. Detailed statement of Bonded Indebtedness stating prior liens, if any, certified by Treasurer of Company and sealed with seal of Company.
M. Contract with Registrar.

Trust organizations must also send a copy of the Deed of Trust.

In making this application it is hereby agreed, as a condition precedent to the listing of Stock, that the Company or Association shall:

(1) Furnish to this Committee at any time, on demand, such reasonable information of its general condition as may be required, and that a failure to give such information shall subject the Company to the penalty of having its Stock stricken from the list.

(2) Publish at least once every year, on or before the date of the annual meeting, a detailed statement of its physical and financial condition, together with an account of its income and expenditures and a balance sheet, and also include an income account and balance sheet of subsidiary companies.

(3) Give the BOSTON STOCK EXCHANGE reasonable notice, satisfactory to the Listing Committee, of any intended increase of the Stock or Funded Debt of such Corporation or Association, and of the closing of transfer books for any purpose; and to give the holders of listed securities a reasonable period within which to avail themselves of any rights to subscribe to shares or securities, or of any allotments of the same.

The BOSTON STOCK EXCHANGE reserves the right to strike any security from the list at any time.

To each of the foregoing and following sheets and to the exhibits enclosed in the envelops the Secretary has affixed his signature for the purpose of identification.

pany with reference to interest, dividends, the issuance of "rights," and the like.

4. The company must publish at least once every year and submit to stockholders 15 days in advance of the annual meeting, a statement of its physical and financial condition, together with the preceding year's income statement. Also, quarterly income statements are now required of newly listed companies.

The above-named.....................................Company hereby applies to have the Stocks mentioned in question "7" above listed on the BOSTON STOCK EXCHANGE, and the undersigned hereby certify that the answers given by them above and in the papers hereto annexed or referred to are true, to the best of their knowledge and belief.

..................................*President.*

..................................*Secretary.*

STATE OF....................

ss.

....

.....................192...

Then personally appeared .... and ....and made oath that they are, respectively, President and Secretary of the above-named Company and that the foregoing statement subscribed by them is true, before me,

...........................*Notary Public.*

We, the undersigned, members of the BOSTON STOCK EXCHANGE, recommend the listing of the within mentioned Stock.

(To be signed by two members in good standing.)

....

....

Engraved Certificates Required

The face of every Bond, Coupon, or Certificate of Stock must be printed from steel plates which have been engraved in the best manner, with such varieties of work as will afford the greatest security against counterfeiting.

For each document or instrument there must be at least two steel plates, *viz.*: A TINT PLATE from which will be printed an anti-photographic color, so arranged as to underlie important portions of the face printing, and a FACE PLATE containing the vignettes and lettering of the descriptive or promissory portion of the document, to be printed in black, or in black mixed with a color.

These two printings must be so made upon the paper that the combined effect of the whole, if photographed, would be a confused mass of lines and forms, and to effectually secure against counterfeiting by scientific and other processes; and the imprint of each denomination of Bonds shall be of such distinctive appearance and color as to make it readily distinguishable from other denominations and issues.

This above rule includes certificates of deposit.

In certificates for 100 shares, the figures must be engraved upon their face, and certificates for less than 100 shares must be printed in a different color and the words "Certificate for less than 100 shares" must be engraved upon the face.

5. The committee reserves the right to remove from the list those securities of which the outstanding amount has become so small as to make inadvisable further dealings therein.

6. "The governing committee may suspend dealings in the securities of any corporation previously admitted to quotation upon the exchange or it may summarily remove any securities from the list."

ADVANTAGES OF LISTING SECURITIES

Brief attention may now be given to a few of the alleged advantages and disadvantages of listing corporate securities on the stock exchange. Among possible advantages the following are of interest:

1. The mere fact of listing establishes a presumption in favor of the soundness of the security listed, since it is necessary for the company (*a*) to answer hundreds of searching questions respecting its financial and operating condition, (*b*) to produce evidence of the legality of the issue, and (*c*) to abide by strict requirements regarding the form of certificates to be used.

2. Further, the requirement that the company must furnish annual reports to stockholders along clearly defined lines suggests an amount of wholesome "publicity" which would not be relished by an unsound concern.

3. The listing of securities makes it possible for them to be generally bought and sold, so that there is always an opportunity to determine the "market value." This trading probably tends to stabilize the values of securities by "discounting" the future, though there are obvious exceptions to this alleged advantage.

4. Listing a security makes it more desirable as collateral for a loan, for there will ordinarily always be a market for it. Hence the listed security may command a somewhat higher price than if it were not listed.

5. Listing the security facilitates large capital flotations and encourages investment in new enterprises, since the owner can readily dispose of his holdings at will.

6. It has been particularly stressed that it is possible to secure much wider distribution of ownership for listed securities, and hence an opportunity is offered for the small saver to become a part-owner of our industrial enterprises. In this connection the following table may be of some interest:

TABLE 19

ESTIMATED NUMBER OF STOCKHOLDERS IN 17 LEADING CORPORATIONS

(*Beginning of 1928*)

American Telephone & Telegraph Company[1]	423,580
Armour & Company (estimate, 1924)	77,000
Atchison, Topeka & Santa Fe Railroad (common and preferred)	58,307
Bethlehem Steel Company (estimate, 1924)	49,497
Baltimore & Ohio Railroad (common and preferred)	42,385
General Electric Company	38,849
General Motors Corporation (common and preferred, end of 1928)[2]	71,000
New York Central Railroad	54,530
North American Company (common and preferred)	40,989
Pennsylvania Railroad (August, 1928)	153,294
Pacific Gas & Electric Company (common and preferred)	46,068
Southern California Edison Company (common and preferred)	116,037
Southern Pacific Railroad	58,117
Standard Oil of New Jersey	55,340
Union Pacific Railroad	51,983
United States Steel Corporation (common and preferred, est. Sept. 1928)	175,000
Western Union Telegraph Company	25,360
Total	1,537,336
Average per Company	90,432

[1]Excluding about 200,000 employees paying for stock under Employees' Stock Plan.

[2]Between November 24, 1928, and February 16, 1929, the number of Common Stockholders is reported to have increased from around 48,000 to 82,415, largely as a result of splitting the stock 2½ for 1.

It is interesting to find that along with the increase in number of stockholders the *average* number of shares held in the largest American corporations has been rapidly decreasing from year to year. At the beginning of 1920, the average number of shares per stockholder of the American Telephone and Telegraph Company was only 37; for the United States Steel Corporation, 49; for the Pennsylvania Railroad, 75. Incidentally, the number of stockholders of the American Telephone and Telegraph Company has increased from a little more than 50,000 in 1912 to 450,000 at the beginning of 1929, and the average holdings have decreased from 66 shares to under 28. For 20 leading railroads there are now four times as many stockholders as 20 years ago. The entire Bell System has about 700,000 *security* holders, excluding duplications.

It is impossible to state definitely the number of individual stockholders of industrial corporations, though there has been a rapid increase in recent years. At the beginning of 1921, for example, 50 of the leading industrial companies reported 868,183 stockholders. Public utility companies probably have at least 2,000,000 stockholders; and, recently the Class I steam railroads report near 800,000. Some careful estimates have put the number of stockholders and bond holders in corporations of all kinds as low as 3,000,000 to 4,000,000. This estimate may be somewhat too conservative at present, but it is impossible to eliminate duplications of individual names.

At all events the securities of most corporations are gradually being more widely distributed, though it is rather difficult to see, in many cases, that this distribution is directly dependent upon the fact that the security is listed on the stock exchange.

DANGERS AND DISADVANTAGES OF THE STOCK EXCHANGE

There are, on the other hand, numerous disadvantages which must be reckoned with by the corporation whose securities are listed on a public market. Such as the following are significant.

1. A company whose securities are publicly traded in is frequently influenced in its financial policy by the present or prospective "market action." It may be possible that officers or their friends have certain private interests in the "market" which will unduly influence executive policies with a view to private gain. Further, no matter how honorable the intentions of the management, there is a tendency to finance with one eye on the stock ticker. Nothing can be more harmful to a corporation than to have the interests of its officers deflected in this manner. Their policy may be in danger of becoming a mere reflex of stock market speculation, and not at all based on sound business considerations. It is scarcely necessary in this connection to mention specific instances. The fundamental considerations are sufficiently clear.

2. In times of financial stress, it very frequently happens that rumors are started regarding the soundness or solvency of

a company, due to the public interest in its securities. These rumors have sometimes been sufficient to lead to serious financial involvements and even to the bankruptcy of the company. There are times when stock market publicity is a serious menace to the sound concern, because of its injury to credit. The fact cannot be denied.[1]

3. There is always the possibility of *speculation* in the shares of a company whose stock is listed on the exchange. The smaller the number of shares issued or the smaller the floating supply, the easier it is to speculate and manipulate. A great deal of the stock exchange trading is of this sort, and the energy thus expended is beyond a doubt an utter economic waste. The practise is further harmful both directly and indirectly to the company whose securities form the basis of speculation. Also, a host of evils develop out of the speculative activities of the stock exchange, which are no doubt partially responsible for the multiplication of dishonest imitators and swindlers of the "bucket shop" variety.[2]

[1] At the time of the slump in United Drug Company stock in 1921, when the president of the company, Mr. Liggett, is said to have lost about $5,000,000, the writer received from a long established and presumably reputable "investment house" a letter beginning as follows:

> "It seems hardly right to make capital out of another man's misfortune, but in view of the fact that every one of us is supposed to be looking out for his own best interest, I think you would be fully justified if you benefited by the hard luck of Mr. Louis K. Liggett."

No doubt it would have been much better both for Mr. Liggett and the United Drug Company had the stock not been listed on the exchange where it could be "raided," and where it was possible for the president of the company to buy on margin.

[2] While it is not the purpose of the present chapter to discuss the technique of stock exchange trading, a few suggestions may perhaps be helpful to those readers who are not familiar with the situation.

To "buy on a margin" means that merely a part of the purchase price of a stock has been paid by the customer to his broker. This percentage of the purchase price, which varies according to the type of stock bought, its price, the activity of the market, and the general business situation, constitutes the "margin." Normally the "margin" furnished by the customer will be from 20 per cent to 30 per cent. The broker will then add an additional 10 per cent or more from his own capital, and the balance, up to 60 per cent or 70 per cent may be borrowed from commercial bankers on the security of the stock which is deposited as collateral. These loans are ordinarily *"call"* or "demand" loans, and collateral acceptable to the banker may always be substituted.

(Footnote continued on page 254)

4. There is little doubt that the ease with which capital can be raised by large corporations whose security issues are dis-

In order to finance his transactions throughout the day, it is usually necessary for the broker to arrange with his banker to have his checks honored to an amount in excess of his actual deposit in the bank at the opening of the day. The creation of a deposit in this way is commonly referred to as "over-certification." Before the end of the day when checks come in and collateral is deposited, the broker's loan becomes properly secured. This practise is being displaced by the so-called "morning loans." In accordance with the latter practise, the broker is required to discount his promissory note with the banker so as to avoid some of the legal and technical difficulties of "over-certification"—a practise which was frowned upon by the Government during the War period, as tending to undesirable speculation. National banks, therefore, have largely adopted the policy of making "morning loans" instead of permitting the broker to overdraw his account. Actually, however, the differences between the two practises is one of form and not of substance.

If the price of the security bought rises, the customer's "equity" is increased, and he may use this increased "book" margin in order to buy still more securities, without actually depositing additional money with his broker. This practise is known as "pyramiding." If, on the other hand, the price of the stock drops so that the required "margin" is endangered, the customer will be called upon to deposit more "margin" within 24 hours, in lieu of which the broker will "sell him out," that is, will sell the stock at the market price and return to the customer whatever portion of his deposit remains after the loss in selling price has been deducted. If too narrow a margin is "put up" by the customer—a practise usually encouraged by the low-grade brokers—a sudden "drop" in the market may "wipe out" all of the "margin" deposited. Naturally, the purpose of "margin trading" is to enable the speculator to control a large number of shares with a small amount of money so that the gain due to advancing prices will be greater. On the other hand, the risks run are also greater, and the average speculator always loses money.

Those who speculate for a rise in the market are referred to as "bulls" while those who speculate for a fall are known as "bears." The "bull" trader is "long" in stock, that is, he buys stock outright hoping to dispose of it to advantage on a rising market. The "bear" trader, on the other hand, "goes short." This means that he sells securities which he does not possess, making delivery therefor by borrowing from other brokers who are "long" in the stock. For this privilege a slight commission is paid, depending upon the activity of the stock borrowed and its speculative position. It is the hope of the "bear" trader to buy an equivalent amount of the stock later at a lower price than that for which he has sold it. With this lower priced stock he can then pay back the stock which he has borrowed to make delivery to his customers. Thus, profits will be made through a drop in prices.

A large proportion of the speculative activity on the stock exchange is, of course, carried on by the brokers in the interests of outside parties. At the present time the usual rate of commission charged by brokers on orders executed for non-members is \$15 per 100 shares, when the market price is between \$10 and \$125 per share. The unit of trading upon the Wall Street Exchange is 100 shares or more. On most other exchanges, however, no definite minimum limit is set to the number of shares which may form the basis of a single transaction.

tributed through the medium of the stock exchange, has frequently led to wholly unwarranted expansion. At any rate the company whose securities are unlisted will as a rule be forced to proceed much more slowly and cautiously than that company which, having made a public reputation for itself, can find a ready market for practically any securities which it may issue, without particular regard to the economic gains which may result through the utilization of an increased amount of capital.

5. It is frequently contended that there is little need for listing corporate bonds on the stock exchange because of the fact that the large number of reputable investment banking houses can make a ready market for such securities. One may perhaps also assert that it would be equally possible for the investment bankers to make a market for the *stock* of sound industrial concerns, provided they would be willing to educate both the companies and the purchasers of securities along the proper lines. However, because of the gains resulting from the division of labor, if for no other reason, considerable economic loss might result if there were no organized central trading place for securities.

In general the economic advantages of the stock exchange have been indicated. Probably the chief function of organized security speculation is to facilitate investment and the growth of large scale enterprise by making possible the easy transfer of ownership. Speculation also tends to discount future events so that the market values of listed securities *may,* in theory at any rate, be more stable. However, securities when publicly dealt in are subject to all manner of influences at times wholly unrelated to the industrial situation. Among these influences may be mentioned politics, foreign relations, idle rumors of different sorts, as well as harmful speculation. He is a bold man, therefore, who will claim that public security trading necessarily tends to *stabilize* security values. In many instances those same values would not be in need of "stabilizing" were the securities unlisted and not generally in the public notice.

LOW-GRADE BROKERS AND BUCKET SHOPS

In conclusion, a brief word may be timely regarding so-called "bucket shops" and questionable brokerage houses. Such concerns were failing by scores during 1922 and 1923, and, unfortunately, a few have been members of the smaller stock exchanges. The typical "bucket shop" makes its money, not by executing orders placed with it, but by betting against the customer. For example, if the customer gives an order to purchase a security at a certain price, the dishonest broker will not immediately execute the order, but will wait for the price to drop, at which time, if called upon for delivery of the securities, he will purchase at the lower price and charge the customer the stipulated price. In this manner, without running any risk, he may make large profits by the use of his customer's money. On the other hand, if prices rise after the execution of the order has been postponed, and the customer then demands his securities, naturally the broker cannot make delivery at the higher price, except at a loss. Consequently, he is in danger of failing, since his own capital is negligible. This fact accounts in large measure for the extremely high number of recent failures among houses of this type.

Among the large number of swindlers who operate under the shadow of reputable stock brokers, are still others who never so much as execute any orders given them. They merely gamble on the difference between quotations, or load customers with some of their own worthless securities, retaining for their own use money left with them, by telling lies to their customers. It would be unprofitable here to recount the various methods followed by low-grade and thoroughly dishonest brokers. Suffice it to say that they make free use of the telephone and of telegrams, and constantly give inside "tips" to their unsuspecting victims. The cost of advertising matter alone put out by some of these houses has amounted to hundreds of thousands of dollars per year. After a certain time they almost invariably "fail," with huge liabilities and negligible assets.

It has been contended by some students of the situation that the multiplication of such swindling concerns is due largely to

the fact that the legitimate brokerage houses will not as a rule handle small orders, and hence do not give the man of small means the opportunity to trade in investment securities or to speculate. The writer would reply to this line of argument that no man of small means has any business whatever to buy securities on his own account. He is, as a rule, not competent to pass upon the desirability of *any* type of stock, and his bond orders can readily be executed through his banker. The average man should be in every possible manner discouraged from entering into any dealings whatever with any broker, good, bad or indifferent. It is unfortunate that he cannot be absolutely prevented from buying stock on a margin, for one of the favorite devices of the dishonest broker is to take his customer's orders on a very narrow margin—in fact, the margin is frequently so narrow that it would be utterly impossible for the broker, on his own capital, to execute the order. The slightest drop in the market, therefore, will "wipe out" all the "margin," and cause the customer to lose his entire principal.

The proper line of procedure would seem to be for reputable brokers to put forth greater efforts to instruct the public as to the underlying principles of investment and to discourage all persons of small means from speculating in any type of security whatever. Not only is it undesirable from the individual's point of view for him to be allowed to speculate in small amounts, but because of the heavy overhead expenses incurred in connection with small orders it is utterly impossible for the reputable broker to be bothered with such transactions. Finally, it is ridiculous to assert, as some do, that because the average individual has in him a "speculative" streak, he should be given an opportunity to "play the market" under the most "favorable" auspices. There are chances enough to take in life without running the risk of throwing away one's hard earned savings. The savings bank is the best place for the man of small resources to keep his surplus, and there is always an abundant supply of government bonds for him to buy if he wishes to "invest"!

CHAPTER XII

CUSTOMER OWNERSHIP AND EMPLOYEE OWNERSHIP

Recent tendencies—A. Reasons for the growth of customer ownership—Examples of customer ownership—The theory and practise of customer ownership in the United Drug Company—Customer ownership in public utilities—The situation in electric light and power companies—Advantages of customer ownership of public utilities—Cautions regarding customer ownership—B. Reasons for the growth of employee ownership—Types of securities offered to employees—The offering price of stock—Methods of paying for stock—Conditions of eligibility—Restrictions on amount of subscription—Provisions for redemption of stock—Special benefits offered to employees—Statistics of employee ownership—Results of employee ownership—Specific cases—General conclusions on employee ownership.

DURING recent years a new type of financing has gradually developed—new, not because of the form of security issued, but because of the *status* of the prospective security holders whom the companies have attempted to interest as investors. Reference is here made to customer ownership and employee ownership plans of financing, which have recently attracted much public attention. Reasons for the attempt to increase the number of stockholders by selling stock to customers and employees are very numerous and frequently complex, depending upon the type of concern and its particular financial problems. The general labor situation as well as the state of public sentiment have also played an important part in this connection. There is an increasing tendency to regard practically every kind of private enterprise, particularly when it owes its existence to definite governmental legislative sanction, as "affected with a public interest." This being the case, it can readily be understood why there should be at the present time a distinct tendency toward "popular" ownership of business corporation. Let us, therefore, examine briefly the significant features of these interesting methods of raising new

capital or distributing the ownership of the already existing investment.

A. CUSTOMER OWNERSHIP

The reasons for selling a company's securities to the consumers of its product or its services may generally be grouped under the following heads:

1. In the first place it may possibly be a comparatively easy and inexpensive method of raising money, particularly for a concern whose reputation is already established, and sometimes even for the newly launched and struggling enterprise.

2. The enlistment of a customer's interest in this manner may lead to the creation of additional good-will which will further increase the sales of the company, both directly and indirectly.

3. Since there is a tendency toward greater public regulation and interference with the conduct of private enterprise, it may be particularly advantageous for companies dealing directly with the public to have as many "friends at court" as possible. Hence, the wider the "popular" ownership of a company, the less likelihood is there of unfavorable legislation and investigation.

The possible disadvantages which may arise from customer ownership and the cautions which should be observed in selling securities to this clientele can best be indicated at the end of the discussion. From the foregoing summary of possible advantages to be derived from customer ownership, it becomes apparent that those concerns *may* be in a position to gain most through this plan whose daily business brings them in more or less constant and direct contact with a large number of customers. It would appear, therefore, that there may be a distinct limit to the extent to which customer ownership can profitably be carried, depending upon the type of business. For industrial companies it would seem that customer ownership might be of most significance in the case of large re-

tailing establishments, chain store enterprises, and the like. It is further perfectly obvious that the various local public service corporations, since their service must be consumed constantly in connection with the plant which renders it, will undoubtedly gain much from an extension of customer ownership. Manufacturing concerns would probably profit least, *unless* they market their product directly or exercise some control over the channels of trade. If their product is a finished good, however, by selling stock to ultimate customers they may be able to gain some control over distribution and perhaps to maintain the selling price.

There are numerous examples of new enterprises the launching of which has been made possible through the sale of stock to prospective customers, and in many ways this is an admirable method of financing a small *local* enterprise. The writer recalls numerous examples of the candy-making business, printing, plumbing and the like, which were successfully financed in this manner. The method has also frequently proved successful in the establishment of moving picture theatres, lunch rooms, and hotels. Many types of so-called "cooperative" businesses are built up mainly by this customer appeal.

A former salesman invented a new and simple device which would probably have a wide sale throughout the country, particularly to retail stores. He did not, however, have enough money of his own to finance his proposed new business during its initial stages. Therefore, he was advised to form a corporation and attempt to sell stock to some of his former customers, who also would, in all probability, be buyers of his new device. This method of finance succeeded after other attempts had failed.

A well-known manufacturing company was so eager to extend its customer ownership a few years ago, and incidentally to conserve its working capital, that it sometimes offered stock as a bonus along with certain much desired large orders, in place of the usual cash discount. On the other hand, the same concern has at times attempted to pay its accounts by offering preferred stock to those from whom it has purchased goods!

Recently a large chain lunch system attempted, through a campaign of newspaper advertising, to encourage its patrons to buy stock of the company, though it was claimed that there was at the time no new financing being done. The aim was probably to develop a more regular class of customers and incidentally, no doubt, to "make a market" for the stock to the advantage of certain large holders. One of the telling arguments used in the "campaign" was that the customer who owned stock in the business would be "paying himself a dividend every time he ate"—very much like Henry Ford's admonition to "buy a Ford and spend the difference!"

One of the most interesting examples of a large company which has been built up around the idea of customer ownership is the United Drug Company which was launched nearly 30 years ago on an initial capital of $160,000, subscribed to by personal friends of Mr. Liggett. The original plan, which has to date been closely followed, was to sell goods only to those stores which would purchase preferred stock of the company, and there was to be only one such agency in each town. Beginning with 150 retail drug stores as local stockholders, the number increased until there were a few years ago about 10,000 Rexall agencies ("Rexallites") throughout the United States. These were all required to purchase at least two shares of stock of the United Drug Company, which for a time could be either preferred or common. An attempt has also been made by the company to extend the customer ownership to the people who buy from the local agencies. In this manner it might be possible to build up a very large body of small stockholders, who would be "boosters" for Liggett products. It is in this connection interesting to note that when the United Drug Company bought out the Boots Company, an English chain of drug stores, it was found that there were 40,000 preferred stockholders of this company, all customers of the various Boots stores.

It must be remembered that from the very beginning the United Drug Company has been an integrated business, manufacturing an increasingly large proportion of the goods sold through the stockholding stores, or through those owned out-

right. Thus there was an opportunity for the company to benefit by this policy in several different ways. Some of the chief advantages earlier claimed for the Liggett plan are as follows:

(*a*) A sure outlet is furnished for drugs manufactured by the company. (*b*) An opportunity is given to standardize the product and improve the quality of drugs by concentrating on certain leading articles. (*c*) Retail methods may be improved through the advice of the United Drug Company. This will mean uniformity in accounting, advertising, and general retail policy. Hence all parties to the transaction may be supposed to gain—the producer, the retailer, and the ultimate consumer. (*d*) By elimination of the wholesaler and jobber, so far as the Liggett products are concerned, it is supposed that distributing costs will be greatly reduced. Middlemen's profits should be saved and actual selling expenses considerably reduced. Thus prices should be lowered and the profits of the company should be increased. (*e*) By this method of customer ownership the company may effectively maintain the selling price, since goods will be sold only to those who will resell at the stipulated market price.

There will probably be very definite differences of opinion as to whether the various claims made have always been realized in practise. However, the extraordinarily rapid growth, and upon the whole, great success, of the United Drug Company may indicate that the policy has been *in itself* a financial success.

Unfortunately, however, the United Drug Company expanded rather too rapidly in post-war years, and its stock was listed on the Exchange. With a comparatively small "floating" supply, therefore, it became subject to a good deal of speculative activity which depressed the price and perhaps discouraged the extensive new customer ownership campaign which was being planned. The passing of the common stock dividend in 1921 also acted as a serious deterrent, though the Rexall agencies throughout the country rallied in admirable fashion when the president of the company found himself in serious financial difficulty in the summer of 1921.

CUSTOMER OWNERSHIP IN PUBLIC UTILITIES

Chief interest, however, centers around the clearly defined movement toward customer ownership among the various classes of public utilities. There are many examples of local electric light and power companies, and particularly of small telephone companies, which have been throughout their existence financed by the sale of common stock to customers. Such companies are really *cooperative* enterprises. Great caution must of course be exercised when local financing of this sort is carried out, so that no outsider will be given an opportunity to purchase "senior" securities, which may perhaps endanger the position of the local investor. To this phase of the subject further attention will be given in a moment.

Recently the various subsidiaries of the American Telephone and Telegraph Company have met with great success in selling stock to customers, even at times when the general business situation was most unfavorable. During 1922 large issues of many millions were thus sold in Texas and in Wisconsin. At the same time the New York Telephone Company was successful in distributing $25,000,000 par value of its 6½ per cent cumulative preferred stock to its numerous subscribers. The stock was sold through employees, and in order to secure wide distribution the maximum allotment to any one customer was limited to 20 shares. Some time ago, also, one of the most dignified investment houses in the United States was active in a campaign to extend the customer ownership of the parent company's stock. The following notice, together with pertinent information, was widely distributed to telephone subscribers:

You Are a Subscriber to a Telephone

Have you BECOME A PARTNER in the business?

Are You Sharing in

THE SUCCESS OF

THE AMERICAN TELEPHONE & TELEGRAPH COMPANY

By Owning Shares of its Stock?

> Honest management, conservative capitalization, constant earnings, steady dividends, are the things which make its shares so highly regarded for investment.

The customer ownership movement has been even more pronounced among the electric light and power companies. Beginning during the earlier days of the war when it was very difficult to enlist the investment interest of outside capital, the movement has grown until it is now a clearly defined, permanent policy. The National Electric Light Association a few years ago published the following advertisement:

BE YOUR OWN PARTNER

A Growing Industry Requiring the Additional Investment of $740,000,000 a Year is a Good Thing to be Interested In!

* * * * *

Investment in this industry will always yield a safe and reasonable return.

* * * * *

Obviously, it is only when he is both investor and customer, that a man is truly his own partner.

Recent figures collected by the National Electric Light Association show that more than 300 light and power companies are selling securities to customers on an extensive scale. Of these companies, 246 of the largest during 1927 sold about 3,581,206 shares. The average number of shares sold per customer purchasing during the entire period has been about 10, and the average for 1927 was about 14. The ratio of total stockholders to total customers is about 1 to 8.5. About $263,500,000 was raised through customer ownership activities in 1927. One-seventh of all employees are stockholders, with average holdings of about 6 shares.

The cost of selling stock by this method, in accordance with which the employees usually act as salesmen on commission, has varied from less than $1 per share to as high as $7 or $8, but the average cost for the year was only $3.48 per share. It can be seen, therefore, that the selling expense to the company is probably somewhat lower than would be incurred if the matter were put in the hands of investment bankers.

The pioneer in this "customer ownership campaign" was the Pacific Gas and Electric Company, which begain the movement in 1914. Up to 1927 this company had sold nearly 600,000 shares of preferred stock to customers. The Southern California Edison Company now ranks first, with about 1,379,000 shares sold at the same date. The Northern States Power Company and the Public Service Corporation of New Jersey

TABLE 20

DATA ON CUSTOMER OWNERSHIP, 1914-1927

SUMMARY OF INFORMATION REPORTED BY 246 ELECTRIC LIGHT AND POWER COMPANIES[1]

	1927	1921
Total population of territory served.......	85,403,575	28,758,605
Total number of customers...............	14,258,315	3,810,626
Gross earnings of combined companies reporting (1927)......................	$1,140,612,585.38	....
Stockholders obtained through Customer Ownership Plan......................	1,681,768	182,836
Shares of stock sold through Customer Ownership Plan......................	16,262,455	1,320,224
Percentage of stockholders obtained through Customer Ownership Plan, to customers .	11.8%	4.8%
Percentage of shares sold on Deferred Payment Plan..........................	14%	30.0%
Ratio of stockholders to population served..	1 to 51	1 to 125
Weighted average cost of selling per share (1927)............................	$3.48	....

SUMMARY BY YEARS.

Year	Stockholders Obtained	Shares of Stock Sold	Number of Additional Companies by Years Adopting Customer Ownership Plan
1914...........	4,044	92,310	7
1915...........	4,357	57,130	3
1916...........	3,681	38,183	4
1917...........	8,242	82,007	8
1918...........	5,186	42,388	7
1919...........	19,872	194,021	12
1920...........	53,063	454,139	34
1921...........	118,544	830,222	37
1922...........	156,725	1,450,707	49
1923...........	279,186	1,806,300	24
1924...........	294,467	2,478,165	23
1925...........	236,043	2,926,271	18
1926...........	248,867	2,686,187	2
1927...........	249,491	3,581,206	18
Total........	1,681,768	16,719,236	246
1928 (est.).....	200,000	2,700,000	

[1]Presented by the Customer Ownership Committee of the National Electric Light Association at the fifty-first Convention, Atlantic City, June, 1928.

rank respectively third and fourth in the number of shares sold to customers, disregarding such management groups as Standard Gas & Electric, Electric Bond & Share, and Cities Service, each of which has sold over 1,000,000 shares, and ranks next after Southern California Edison. Though in most cases preferred stock has been sold, common stock has also been distributed in this manner. The Commonwealth Edison Company, having no preferred stock outstanding, has sold common. Some of the companies sell their shares for cash, while others give an opportunity to purchase on a deferred payment plan, the subscriber paying a certain amount each month after the original subscription payment. In 1927 only 14 per cent of the shares were sold on a partial payment plan, but in earlier years 25 or 30 per cent was common.

The accompanying table presents further interesting data on customer ownership in central station companies. Unfortunately, no similar figures are at present available for industrial concerns which have adopted this policy.

ADVANTAGES OF CUSTOMER OWNERSHIP OF PUBLIC UTILITIES

Among the alleged advantages of customer ownership for public utility companies the following are particularly stressed by proponents of the movement:

1. Public "partnership" increases the good-will of the company because of the large body of local investors whose friendly attitude and whose influence will extend throughout the community.

2. This policy of local financing encourages thrift among the mass of the people by pointing out the advantages of saving, and by offering to them a sound investment in an enterprise which they know about, operating under public regulation, and offering securities purchasable in small amounts.

3. This method of selling stock increases the efficiency and loyalty of employees because of the fact that they are thus induced to make themselves more familiar with the company's affairs and because they are usually given an opportunity to supplement their income by commissions on the sale of stock.

4. It is also contended that this method of financing serves as an effective argument against any move toward municipal ownership or hampering public interference, since in a very real sense local *popular* ownership is already secured. That this argument is sound can be seen from the fact that nearly 90 per cent of the stockholders of the three larger reporting companies are customers. (See Appendix, p. 804.)

CAUTIONS REGARDING CUSTOMER OWNERSHIP

After this brief survey of the general problem of customer ownership, it may be well to suggest some of the possible disadvantages and to extend a word of caution.

1. It is absolutely essential that the customer be not deceived regarding the type or safety of his security, and that his interests be not endangered through the issue of senior obligations. If customer ownership is to be extended in any type of industry, anything savoring of speculation should be avoided. This is particularly true in the case of public utility concerns, in which care should be exercised not to risk the customer's money in any class of stock the dividends on which might be endangered in adverse years. The customer's interests should be thought of first, for his position should be that of the investor unless he voluntarily wishes to make it otherwise, under which circumstances he should be thoroughly informed as to the nature of his risks.

2. It is further important for a company to consider carefully whether it will really be advantageous to have a large number of small stockholders who may, perchance, since they are in the locality, exercise more control than is appreciated by the managing officers of the company. It is particularly significant to note in this connection that if the business is largely owned locally, and the management changes or for some reason dividends must be passed, great *ill-will* may possibly result instead of the "good-will" which the company had originally hoped to secure.

Carried to its ultimate conclusion, complete customer ownership for many types of enterprise would become simply a form of *cooperative* ownership, bringing in its wake all the alleged evils that have sometimes been attributed to this form of organization.

B. EMPLOYEE OWNERSHIP

Of recent new developments in the field of business administration and finance few have aroused more interest than some of the various "employee ownership" plans which have been developed by leading corporations both here and abroad. While complete data are not available, there are at the present time probably more than three hundred important corporations in the United States which have adopted some kind of scheme, quite apart from any profit-sharing plan, which will make it possible for their employees to become stockholders in the company within certain more or less definite limits. It is estimated that 1,000,000 employees have bought their company securities to a value of at least $1,000,000,000. Also, many corporations which do not actually sell stock to their employees have undoubtedly induced them to invest some of their savings in the company. Though in a large number of cases which have come to the writer's attention the "plan" was not first put in operation until 1919 or 1920, there are several outstanding examples of United States corporations which adopted the scheme many years ago. The best known of these is the United States Steel Corporation, which began to sell stock to employees in 1903.

Inasmuch as the development along this line has in most cases been so recent, it is interesting to inquire into the reasons for the movement. Back of it all is probably the desire to avoid labor difficulties and to increase production by inducing employees to take an investment interest in the business. Specifically, perhaps the following reasons, either singly or collectively, have accounted for the introduction of "employee ownership" in most instances:

1. Some companies whose labor problem is a serious one because of their relatively large number of employees, have encouraged employee ownership with a view to preventing strikes, or discouraging the formation or joining of unions by their employees.

2. Many concerns have hoped to decrease their labor "turnover" by making an *owner* out of the employee.

3. Other companies have probably had uppermost in mind the fact that during the period of inflated wages, overtime work, and the like, the efficiency of employees began to be much curtailed, partially due to the attitude of the workers themselves. It was felt, therefore, that if these workers could be given an investment interest in the business, they could more readily understand its financial operations, and, seeing the direct relation existing between the effectiveness of labor and profits available for dividends, would work with a better will and increasingly to the advantage of all concerned.

4. Again, and closely related to the foregoing, has undoubtedly been the desire on the part of the management to *educate* the employees as to the problems and methods of business. Many employers have rightly surmised that the only sure method of adjusting industrial difficulties and lowering the cost of living is, through a patient campaign of "education," gradually to bring the worker to a point where he will understand the economic principles involved in the production and distribution of wealth. It has sometimes been felt, therefore, that employee ownership is an important first step toward the desired goal.

5. In many cases employee ownership has been placed on a largely philanthropic basis, and may be classed under the head of "profit sharing" or "welfare work." There are instances in which the aim has been purely one of profit sharing, and it has been thought more advisable, or has perhaps been more convenient, to distribute the profits of the company in the form of stock than to make a cash payment.

6. Some companies, particularly public utility companies, have encouraged their employees to buy stock as an "invest-

ment," hoping thereby to develop among them a spirit of thrift. This action is based on the assumption that it is desirable to encourage every employee to save, since as a result of so doing he will become a better worker and a better citizen. Therefore, by making it easy for him to save money and pay for preferred stock in small weekly amounts, not only will the individual be benefited but also good-will may be created, and a new source of investment capital may be developed for the future.

7. Finally, some few companies have undoubtedly used this method of selling securities in order to raise additional capital with little effort or expense on their own part. When employee ownership has been encouraged for this purpose some of the other considerations have also usually been thought of. There are, however, a few cases in which a very shortsighted and disastrous policy has been followed in this regard.

So much for the general reasons which may have led to the adoption of employee ownership plans by various companies. It may now be of some interest to review, in an outline fashion, the essential characteristics of the various plans which have been adopted. The outstanding features may conveniently be grouped in the following manner:

a. The Types of Securities Offered to Employees

1. Only the common stock may be offered, as is the policy of the United States Steel Corporation at the present time. The majority of industrial companies seem to favor the distribution of common stock.

2. The purchase by the employee may be restricted solely to the usual type of preferred stock. A number of public utility companies follow this policy.

3. Some companies, as, for example, the Studebaker Corporation, offer either common or preferred stock according to the wish of the employee. In earlier years, also, until 1914, the United States Steel Corporation sold both common and pre-

ferred, though at first only preferred was offered. At present, however, only common stock is sold.

4. Other companies issue a special class of stock for distribution among employees. The Commonwealth Edison Company of Chicago, for example, put out a non-voting debenture issue; the S. D. Warren Company (one of the most conservative among paper manufacturing concerns) would sell only a special prior preferred stock, which was in all respects practically a bond of the company. The industrial partnership stock given by the Dennison Manufacturing Company was also a special issue which is not marketable by the employee.[1] When *special* stock is used for this purpose it does not ordinarily carry voting privileges, and in other respects may be unlike the ordinary common or even preferred stock. In a few instances the company has "guaranteed" dividends on the stock.

5. In a few cases it has been thought best to keep the employee solely in an investment position. Hence he has been

[1] It should be explained that the employee-ownership plan followed by the Dennison Manufacturing Company is really a profit-sharing scheme, and, therefore, unlike the various plans which are relevant to the present discussion. The company has really been organized during the past 15 years as an industrial "partnership," composed of two groups: the "managerial industrial partners," who have been with the company at least five years and whose positions require the exercise of some degree of managing ability; and the "employee industrial partners," who compose the remainder of the employees. At the time of the reorganization, in 1911, the then existing investment interest was paid off by means of preferred stock which gives no share either in the net profits or in the control of the corporation, and is very similar to a bond.

Each year after dividends are paid on preferred stock and on any other outstanding stock of any kind, the remaining profits are reinvested in the business, and against this investment shares of so-called "industrial partnership stock" are issued. These shares are distributed, two-thirds to the managerial partners in proportion to their relative salaries, and one-third to the employee partners in proportion to their length of service. To be eligible as an "industrial partner" an employee must have been in the service of the company for at least three years. The sole voting power is lodged in the stock held by the managerial industrial partners.

Cash dividends on industrial partnership stock can not be paid in excess of 20 per cent and are limited to not more than one-half of the profits remaining after preferred dividends are paid; nor can new industrial partnership stock be issued unless during the year there has been paid a cash dividend of at least 5 per cent on the already outstanding stock.

The Dennison plan is wholly unique, and has apparently met with very great success. Before the adoption of this plan, the company had for many years sold stock to employees at less than its actual value. It is felt, however, that the earlier method did not lead to the results hoped for.

given an opportunity to subscribe for bonds. One of the most interesting experiments along this line is that recently tried by the General Electric Company, which sold 7 per cent investment bonds in denominations as low as $10 to its employees. However, it is no longer possible for them to subscribe to the common stock of the company, but to bonds of the General Electric Employees' Securities Corporation.

b. Prices at Which the Stock is Offered by the Company

1. The stock may be sold to employees at *par*, under which circumstances the company usually distributes some of its authorized but unissued stock, or stock held in the treasury. Sometimes special inducement will be offered to the employee by selling stock to him at a slight discount when the general price to the public is par. Or it may be that it will be offered to the employee at par when the stock, already on the market, is commanding a premium. Probably in most cases the price has been fixed at par irrespective of market considerations.

2. Frequently stock has been offered at, or near, the prevailing "market" price. Under such a method the stock may either be purchased by the company on the market or may be issued from the treasury. Further, the price for each year's offering may be fixed at a point slightly under the recent market quotation for the stock, or it may represent the average price paid by the company for the stock which it has found it necessary to purchase for the purpose of distribution among employees. The Standard Oil Company of New Jersey fixed the subscription price for employees at 155 early in 1921. The last sale of stock on the exchange had been at 160½. The United States Steel Corporation, having no unissued or treasury stock, always buys on the stock exchange the shares which are to be allotted to the employees. It is said that the offering price is usually determined by the average cost to the corporation of purchasing the stock. The New York Central Railroad Company apparently purchases stock in the open market *after* subscriptions have been received.

3. In the third place, stock may be given outright to employees, under which circumstances a definite par value is usually assigned to the shares without any reference to prevailing prices on the market, if, indeed, it is a type of security which is being publicly traded in. When, in accordance with a "contributing" plan, the company pays a portion of the subscription price while the employee pays the balance, the offering price is usually the "market" price, unless the company has unissued stock.

c. Methods of Paying for Stock

1. The entire subscription price may be paid by the employee. This is the method followed by the United States Steel Corporation, the American Telephone and Telegraph Company, the General Electric Company and by the majority of companies having this plan.

2. On the other hand, some companies *contribute* a certain proportion of the subscription price. For example, the Studebaker Corporation pays 50 per cent, provided employees keep up their payments and remain in service continuously for four years. The Standard Oil Company of New Jersey in 1921 offered to pay an additional 50 cents for every dollar subscribed by the employee.

3. The entire subscription price may be paid outright, though usually it is arranged that payments may be made on an *instalment* plan, either with or without an initial subscription deposit. The period over which instalment payments are permitted ordinarily varies from a minimum of one year to a maximum of four or five years. The Studebaker Corporation allows four years and the Standard Oil Company of New Jersey five. The number of payments which may be made on the instalment plan is extremely varied. In some cases, payments are to be weekly, and in other cases monthly, quarterly, or even semi-annually. Usually, also, a definite amount for each payment is stipulated which may be either a flat sum or a certain percentage of the monthly or weekly salary. Some companies fix minimum and maximum limits to these periodic payments. The

lowest noted minimum is 25 cents per week, but the customary amount is much higher, depending upon the status of the employee.

4. In arranging for instalment payments two methods are followed: (*a*) the employee may himself pay the stipulated amount to the company, or (*b*) the periodic payment may be deducted from his pay check.

5. Some companies organize a "thrift bank" in order to encourage their employees to save small amounts, and when these amounts have accumulated until there is sufficient to buy a share of stock, have then persuaded the employees to subscribe, with a view to securing a higher rate of return.

d. Conditions Under Which Employees May Be Eligible to Purchase Stock

1. The subscription to stock may be open to all without any restrictions, as in the case of the United States Steel Corporation.

2. Subscriptions may be limited to certain classes of employees, particularly to those who may be termed the "managerial" employees. This is the method formerly followed by the Youngstown Sheet and Tube Company.

3. Closely related to the foregoing restriction is the policy of limiting the subscription privilege according to the amount of the annual wage or salary. In some instances no one receiving a salary below a certain *minimum* fixed by the company has been allowed to purchase stock from the company, while in other cases a definite *maximum* limit has been set. The Great Northern Railway Company formerly fixed the "maximum" salary at $3,000, while the Boston Woven Hose and Rubber Company originally set a "minimum" salary of $1,200. This type of restriction, however, is not common.

4. The commonest restriction as to eligibility has to do with the length of service of the employee. When stock is *given* to the employee, the time of service required is usually long, the

minimum for "managerial" employees being fixed at five years in the Dennison Manufacturing Company. The usual time limits vary from six months to two years. Sometimes, however, the period is briefer and sometimes much longer. Usually, "continuous" employment is insisted upon.

5. Sometimes, when the company "contributes" a portion of the subscription price or presents the stock to the employee, there are additional restrictions imposed, having to do with the employee's efficiency, promptness, general attitude, and other similar considerations.

e. Restrictions on the Amount of Stock Which May Be Purchased

1. Some companies place no restriction whatever on the amount of the employee's subscription, nor do they fix a definite *time* when he must subscribe. They merely sell him any amount that he wishes at any time. This, however, is not a common practise except among the smaller concerns. More frequently the company will offer annually a certain block of stock which can be taken by the employees according to a definite scale.

2. When restrictions are placed upon the number of shares which may be purchased, employees are frequently grouped according to *salary classes*, those within certain groups being allowed to subscribe up to a fixed maximum limit.

3. It is not uncommon to limit the number of shares to be taken to a certain *percentage* of the annual salary or wage. This percentage varies widely, sometimes being as low as 5 per cent or 10 per cent, and sometimes as high as the entire salary! The United States Steel Corporation fixes the maximum at 15 shares for employees receiving a salary over $35,380. Those receiving salaries of $1,220 or less are entitled to subscribe to only one share. The Standard Oil Company of New Jersey limits subscriptions to 20 per cent of the annual salary; the American Telephone and Telegraph, to 12 per cent, with maximum of 50 shares for salaries of $15,000 or more.

4. A few companies limit the number of shares in accordance with the *length of service* of the employee. This policy is followed by the Elgin National Watch Company.

f. Conditions of Redemption of Stock or Cancelation of Subscriptions

It is very difficult to classify the methods followed by companies when subscriptions are canceled or when employees wish to dispose of stock already purchased. Much depends upon the conditions under which the stock was originally sold and whether there is an active market for it. It is further important to know the reasons why the employee wishes to have his stock "redeemed." The usual circumstances under which subscriptions are canceled are, (*a*) because of the inability to meet periodic payments, or (*b*) because the employee has left the service of the company, either voluntarily or involuntarily. Under such circumstances he will ordinarily have returned to him the principal which he has paid in, and if his payments have covered a period of six months or more he will ordinarily receive in addition interest on the amount paid in. Regarding the redemption of stock already paid up the following points may be noted:

1. If stock was sold to the customer at par as an "investment," some companies will buy it back at the purchase price, provided there is no public market for the stock.

2. In some cases in which the company has sold stock at the "market" price, it will also buy back at the prevailing market price. Under such circumstances, however, the company would usually let the employee sell his stock on the open market.

3. Some companies will redeem the stock at a premium in case the employee dies or retires because of old age, accident, or the like. The United States Steel Corporation in such instances will, under certain conditions, even make good any unpaid subscriptions for the benefit of the unfortunate employee's heirs.

4. Some companies request that when an employee severs his connection with the concern, he shall offer to sell back the stock, frequently at a premium. When a special class of stock has been issued which is not "marketable," the company will always either buy it back or exchange it for ordinary stock. For example, the Dennison Manufacturing Company requires that its industrial partnership stock be exchanged for second preferred stock when an employee leaves the concern.

g. Special Benefits Accruing to Employee Stockholders

Many companies offer special inducements to their employees in order to encourage them to become *permanent* partners in the business. The United States Steel Company, for example, pays each stockholder a bonus ranging from $3 to $7 per share in the fifth year, provided the stock is continuously held and the employee's record has been satisfactory. Apparently this policy has led to the desired result, since the books of the corporation indicate that only a small amount of the stock thus purchased by employees has been resold. Some companies also give additional *profit-sharing* stock to employees who have held their stock for a certain length of time.

EXTENT OF EMPLOYEE OWNERSHIP

According to a study made by the National Industrial Conference Board, covering 315 companies having employee stock ownership plans in 1927, 806,068 employees, or about 30 per cent, out of a total of 2,736,448, had purchased stock the total market value of which (middle of 1927) was around $1,045,150,000. Table 21, based on figures compiled by the Industrial Relations Section of Princeton University, indicates that employee stockholders of 17 companies in number constituted about 25 per cent of all stockholders, although their holdings represented only 5 per cent of the market value of stock then outstanding. The average value of holdings per employee was about $1,318.

TABLE 21

Employee Ownership in 17 Corporations, 1926[1]

Company	Number of Employee Owners	Ratio (Per Cent) To All Stock-holders	Ratio of Employee Holdings To Total Stock	Total Market Value of Holdings	Market Value of Average Holdings
Am. Tel. & Tel. (Bell System)[2]	57,000	14.49%	5.60%	$ 86,000,000	$1,508
Bethlehem Steel	35,000	62.71	6.56	11,829,896	337
Brooklyn Edison	6,389	56.27	1.54	1,799,550	281
Henry L. Doherty & Co.	9,000	8.49	3.09	8,950,000	994
Eastman Kodak	15,000	57.64	8.44	20,517,000	1,367
International Harvester	12,000	54.54	7.16	15,240,000	1,276
Lehigh Valley Railroad	2,127	22.38	.88	912,000	428
National Biscuit	3,084	19.64	3.35	7,259,868	2,354
New York Central	26,870	41.91	1.64	8,364,370	311
Pennsylvania Railroad[3]	19,500	13.91	.95	5,348,504	274
Philadelphia Rapid Transit	12,285	21.40	27.81	13,349,575	1,086
Procter & Gamble	4,236	55.88	11.61	23,069,210	5,445
Standard Oil (California)	11,854	20.55	3.83	28,494,109	2,403
Standard Oil (Indiana)	17,416	34.98	4.12	24,443,055	1,403
Standard Oil (New Jersey)	19,135	43.70	4.18	36,288,000	1,896
Swift & Company	13,000	27.65	11.39	20,000,000	1,538
United States Steel	53,974	37.66	8.77	106,583,936	1,974
Total	317,870	25.00%	5.00%	$419,137,063	$1,318

[1]Based on study made by Princeton University.

[2]More recent subscriptions by employees of the Bell System have amounted to 830,000 shares which are being purchased by more than 200,000 employees, many of whom, however, are already included in the 57,000 who are now owners of stock.

[3]In 1928 over 100,000 employees of the Pennsylvania R. R. subscribed to 350,000 shares, with a par value of $17,500,000, and present market value (May, 1929) of $28,000,000.

The American Telephone and Telegraph Company reported late in 1928 that 85,000 employees of the Bell System were already stockholders of record, with average holdings of 9.3 shares, representing a total market value of around $158,000,000! Also, about 215,000 were paying for stock on the subscription plan. As the total number of employees was around 380,000, it appears that at least 60 per cent of all employees are prospective stockholders.

During the past 20 years United States Steel Corporation employees have subscribed for more than 1,600,000 shares. At the end of 1928 there were 49,201 registered employee stockholders, having 661,005 shares of common and 132,037 shares of preferred. In addition 19,849 were paying for stock. Employee owners were about 32 per cent of all owners.

Incidentally, it is interesting to note that for the year 1927 the total savings deposits in United States banks of all kinds amounted to more than $26,000,000,000, and the number of

TABLE 22

RECORD OF EMPLOYEE SUBSCRIPTIONS TO THE COMMON STOCK OF THE UNITED STATES STEEL CORPORATION, 1909-1928

Year	Shares	Price	Total Amount
1928	94,077	$145	$13,641,165
1927	74,351	122	16,034,094
1926	131,427	136	10,111,736
1925	82,948	125	10,368,500
1924	113,588	100	11,358,000
1923	100,730	107	10,778,000
1922	93,645	84	7,866,180
1921	255,325	81	20,681,325
1920	161,201	106	17,087,306
1919	155,816	92	14,277,112
1918	95,437	92	8,780,204
1917	66,410	107	7,212,870
1916	49,742	85	4,228,070
1915	None offered	....	....
1914	47,680	57	*7,224,990
1913	25,793	66	*5,468,397
1912	30,735	65	*5,365,865
1911	29,119	70	*4,230,430
1910	None offered	....	....
1909	15,318	50	*2,745,900

*Includes value of preferred stock sold.

separate accounts was between 45,000,000 and 50,000,000—an average of $500 to $600. In addition, there were 10,665,705 members of building and loan associations with total assets of $6,334,103,807, or about $600 per member. At the end of 1927, also, there were estimated to be about 109,392,000 life insurance policies in force, for an estimated total of more than $87,000,000,000. The number of separate persons insured at the same date is estimated at 70,000,000, and the admitted assets of all life insurance companies was $14,392,000,000, or around $200 per policy holder. The total of all these forms of investment was almost $47,000,000,000, or about $400 per capita for every man, woman, and child in the United States.

RESULTS OF EMPLOYEE OWNERSHIP

Much might be said regarding the experience of different concerns which have introduced employee ownership. A few examples of different sorts may be briefly mentioned, usually without giving the names of the companies involved.

Beyond a doubt a number of companies have through employee ownership reduced their labor turnover. It is, of course. impossible in many instances to be sure that the greater permanency noticeable in the labor force has been the result of

stockholding among the employees. In some cases the stock ownership has been rather narrowly confined to certain groups of employees in such a way as to preclude the drawing of definite conclusion as to its effectiveness. In the majority of instances, also, plans have been so recently adopted that it would scarcely be justifiable to attribute the recent decrease in labor turnover to the operation of the plan itself. In periods of depression most every worker as a matter of course wishes to retain his job. Perhaps the following extract from a letter written by President Erskine of the Studebaker Corporation, explaining the results of their stock ownership plan, which appears to be one of the most liberal and satisfactory schemes thus far adopted, may be of some interest in this connection:

> "The rewards paid the men are for value received and in no sense may be considered charity or welfare distribution. We do not like these words and the men resent them. We claim that experienced employees are more valuable than inexperienced ones and that we can afford to pay for this value. The payments under this plan are fixed charges of operating the business and come before dividends to stockholders. This year the aggregate payments will exceed $2,000,000. We have put the plan in effect since September 1, 1919, and are very much pleased with the results accomplished. Our labor turnover at all plants for the first five months of this year (1921) was 5.6 per cent against 108.9 per cent last year (1920); and while, of course, the lack of employment may account for a large part of the decrease in turnover, we believe that the maintenance of continuous service records by the employees has actuated them to stick to their jobs."

There are further interesting cases in which the employees, either directly or indirectly, have exercised a very decided voice in the management of their companies as a result of their stock interest. In one instance the employees are said to have acquired control of a company which was threatened with a receivership and to have thoroughly organized it in such a manner that it has continued to operate satisfactorily. Further, a good deal of public attention has recently been given to the situation which developed in the Philadelphia Rapid Transit Company, when the employees bought and controlled

enough stock to enable them to keep the president of the company, Mr. Mitten, in office at a time when certain powerful ownership interests were apparently on the point of ousting him. In this case the stock seems to have been bought on the open market directly by the employees themselves. A somewhat different situation developed recently in a well-known confectionery company when the stockholding employees sold their shares to a rival interest, which then proceeded to eject the management which had introduced the stock ownership plan!

Several companies with a wide distribution of ownership among their employees found it possible, during the falling wages of 1921 and 1922 to keep the good-will of their employees in spite of necessary wage decreases. In fact, there are instances on record in which the employees themselves have requested a decrease in wages because of the company's straitened circumstances. This has happened both in industrial and public utility concerns. There are other instances in which employees have, as a result of their ownership interest, made special efforts to reduce expenses and increase the effectiveness of operation to such an extent that wage reductions have been unnecessary.

On the other hand, the writer knows of cases where employees have been much disgruntled as a result of the reduction of the dividends paid on their stock, or perhaps the dividend has even been unavoidably passed, much to their disappointment and irritation. One prominent steel company offered shares of common stock to its employees early in 1921 and shortly thereafter cut its dividend 50 per cent. During the following year its deficit amounted to several million dollars and all dividends were passed. At no time after the stock had been offered to employees was the market price as high as the offering price.

Practically all the employees of one of the largest rubber companies in the world subscribed to preferred stock just before the break came in 1920. By the end of the year they owned about $12,000,000 par value of the company's stock, or about $1,000 per subscriber. Some of these employees had put

all of their savings into the stock as an investment, while others mortgaged their homes or sold their Liberty Bonds in order to raise money to pay for the stock. This was a 7 per cent cumulative preferred and was sold at par. No dividends were paid on this stock for many years after October 1, 1920, and after the reorganization of the company the stock was for a long time practically valueless, although it has recently come back to par.

There comes to mind another case in which the stockholding employees of a large company began to speculate in the company's stock, several years ago. They learned to buy the stock on a "margin," until a number were practically ruined as a result of the rapid drop in the market price of their stock. In still another instance, the chief owner of a small company raised additional funds at a time when his financial condition was precarious by selling stock to employees as an investment. The inevitable failure came, leaving a number of employees practically destitute.

GENERAL CONCLUSIONS ON EMPLOYEE OWNERSHIP

Little more need be said regarding the results and possibilities of "employee ownership." In most cases the companies are very well pleased with the results attained. The different plans presented possess varying degrees of merit. Some plans would scarcely be workable under any circumstances, though upon the whole it may be said that more depends upon the management of the company than upon the type of plan followed. Much also depends upon the nature of the business itself, its special problems, and its peculiar relationship to the business cycle. In leaving this subject, perhaps the following suggestions may profitably be borne in mind:

1. It is questionable whether a company is justified in selling stock to its employees in order to raise "new capital." The future is ordinarily too uncertain, and, except for the most stable and seasoned types of enterprise, it is rather difficult to predict what effect the additional capital will have on the earnings of the concern. Certainly, the officers of any com-

pany who would encourage employee ownership as a means of securing funds for "emergency" purposes should be severely dealt with.

2. The company which proposes to sell stock to its employees assumes a very serious obligation. It should, in the first place, carefully instruct its employees as to the significance of "ownership" in the business, and should explain to them the essential factors of business organization. It is further necessary particularly to warn the employees against the evils of speculation.

3. It is absolutely essential that the stock ownership plan be made very clear in all of its details. The employee must know exactly what he can expect in a financial way and exactly what limitations are imposed upon him. He should also be instructed that he must live up to his agreements; while the company must, in turn, be scrupulous in keeping its promises. Simplicity and clarity are absolutely essential to the successful operation of any plan.

4. As a rule the rank and file should not be encouraged—perhaps not even *allowed*—to buy anything but an "investment" interest in the business. That is, the company should sell them preferred stock rather than common stock. This preferred stock should also carry with it carefully worked out protective provisions applying to the common stockholders for the benefit of the preferred holder. Further, it is questionable whether a company which has outstanding "senior" obligations in the form of bonds should sell even preferred stock to employees. The decision on this matter, however, will depend pretty largely on the nature of the company and its past record.

5. Opinion is sometimes expressed to the effect that unless the employee is made a "common" stockholder, the real purpose of employee ownership is defeated. It is, of course, possible that the *common* stockholder will have much more direct interest in the business of the company, and will realize more clearly that the payment of dividends depends very largely upon his personal efforts. Perhaps, an employee holding well-protected preferred stock or bonds of a company might not so readily develop the sense of proprietorship.

On the other hand, it should be borne in mind that for countless reasons wholly beyond the employee's control a business may fail to make profits. The experience of the post-war period should be sufficiently conclusive evidence on this point. It is a brave man who will contend that the wage earner's savings should be endangered in order to give him the "feeling" of ownership. Certainly, it cannot be made too clear to the employee that he is normally assuming a good deal of a risk if he purchases the *common* stock of any industrial concern no matter what its past record of earnings.

6. Whenever any employee ownership plan is adopted by a company, it should be made in *reality,* as well as in name, clearly *voluntary.* The writer recalls one instance of a very large concern whose employees were made to feel that a certain stigma attached to them if they refused to subscribe to the company's stock. In fact, the non-subscribers were made to feel very uncomfortable, both by the officers of the concern and by their fellow workers. Sometimes it has been charged, not wholly without cause, that partiality has been shown by the management to those employees who subscribe to stock, and that the non-subscribers have been unfairly treated. Needless to say, if any such policy develops in a company it defeats the chief aim of employee ownership, which is to increase good-will among the workers and thereby secure a more efficient organization. *Absolute impartiality and the careful avoidance of any compulsion are essential to the success of any plan which may be adopted.*

7. It is also an important question to decide how far employee ownership should be carried. Will the best results be secured by confining it to the more responsible employees, or to those whose length of service has been long? *Where* should the line be drawn, and *how* should it be drawn in order to secure the best results? The management of each company must decide.

8. Further, it should be borne in mind that employee ownership is no *panacea* for industrial ills. There *is* no panacea. When the labor situation was ominous in 1919, many companies, both in this country and in England, were ready to try

any scheme which might promise escape from threatening disaster. It is reported that in England 51 new "co-partnership" plans were adopted in 1919, 50 in 1920, and only 13 in 1921. Many companies probably adopted the plan more or less because it was the "popular" thing to do, and not as the result of scientific study. In recent years, however, a highly successful combination of profit-sharing and stock ownership for responsible employees has been worked out in the United States—the outstanding instance being the General Motors Corporation.

9. Unquestionably, the sale of stock to employees, with full payment not permitted until the lapse of a considerable period, say three years, may seriously restrict the free movement of an employee, to his own detriment. In recent years the writer knows of a number of cases in which faithful employees have foregone the opportunity to make advantageous changes in employment because they did not wish to lose the market appreciation on the purchase price of their stock.

10. *Perhaps the chief argument in favor of employee stock subscriptions is the fact that this is a generally painless method of saving, and many are in this manner taught their first lessons in thrift.*

Rightly employed, with careful planning and cautious administration, with absolute integrity on the part of the management and a vital interest in the welfare of the workers, a company can, no doubt, accomplish highly satisfactory results through the encouragement of employee ownership. The same type of management might also achieve satisfactory results without adopting any definite program of employee ownership.

CHAPTER XIII

FINANCIAL STATEMENTS AND THEIR INTERPRETATION

Accounting and business finance—Reasons for lack of uniformity in financial statements—The typical balance sheet—Analysis of the assets—Special importance of inventory—Analysis of the liabilities—The surplus and its significance—Frequently used balance sheet terms—Fixed assets, current assets, current liabilities, current ratio, working capital, net worth, book value of stock—The profit and loss account analyzed—Commonly used terms in the interpretation of income accounts—The operating ratio, ratio of net profits to sales, turnover of inventory, margin of safety—Increasing use of financial statements.

IN the preceding discussions frequent reference has been made to balance sheets, and it will be necessary constantly to assume on the part of the reader some general knowledge of accounting terminology. Therefore, for the benefit of those who may not have had a preliminary training in the subject, attention will here be given to the more common financial statements with which the student of finance must be familiar, namely, *balance sheets* and the *profit and loss account* or *income statement*. Provided the aim of the one who draws up such statements is to inform and not to conceal, there is really no great mystery about the figures ordinarily used in this connection.

Balance sheets and income statements are historical rather than prophetic. Rightly used, however, they not only give a record of a company's past financial performance, but also convey to the student some premonition regarding the future. Yet no balance sheet, however carefully constructed, can at any time give an absolutely accurate picture of a financial situation. Every going concern is moving either forward or backward at a more or less rapid pace, depending upon the nature of the business and the character of its management as well as upon the general business situation. In other words, a business is

dynamic while a balance sheet is merely *static*—it records only the periodic changes in a company's affairs, and not the continuous changes.

Again, the student of finance cannot but be puzzled at the astounding lack of uniformity in the financial statements of average industrial concerns. While it is true that the better practise is tending toward the adoption of more or less definite policies and standards, about which further mention will presently be made, there has not hitherto been any central regulation of the accounting of business concerns comparable to that which has for a number of years been imposed upon the various types of public service corporations either through the Interstate Commerce Commission or through the various state-appointed public utility commissions. Nor should it be assumed that even public utility companies have arrived at a wholly definite and uniform basis for their accounting. In fact, until very recently nearly every state prescribed its own system of rules, which in many important respects varied from the standards laid down by other states. In this connection, perhaps, it may be of some interest to the reader to glance at the accompanying table which indicates in a general way the essential differences existing between the balance sheets of manufacturing enterprises and the various types of public utility organizations. Owing to the rather complicated character of railway ownership, which has led to the inclusion of many balance sheet items which are not commonly found in the other types of public service corporations, the "investment" item is relatively high. (*See Table 23.*)

REASONS FOR LACK OF UNIFORMITY IN FINANCIAL STATEMENTS

The lack of uniformity in the financial statements of industrial concerns extends both to *form* and to *substance*. So far as the form is concerned, every variety of balance sheet will be found, from that of the little business whose books are kept in the head of the individual owner, to the extensive and carefully worked out annual reports of such companies as the United States Steel Corporation or the Pennsylvania Railroad,

TABLE 23

Comparative Financial Statements of Industrial and Public Utility Companies[1]

(In percentages)

	Industrials (large) (1925)	All Commercial Central Stations (1922)	All Stations in California (1917) (Hydro-Elec.)	All Street Railways (1922)	Telephones (1922)	Gas: Massachusetts (1920)	Gas: California (1920)	Water: California (1920)	Class I Steam Ry. Co (1923)
Total									
Number	59	3,774	98	1,200	1,323	58	25	299	179
Assets (million dollars)	$12,899	$5,505	$450	$6,655	$2,595	$110	$63	$205	$24,745
Assets									
Plant account, tangible	[2]52.9	77.9	83.0	77.3	82.2	[3]86.7	82.5	81.0	69.2
Securities, investments, etc.	8.9	9.2	4.2	10.5	9.4	2.7	1.5	8.5	21.1
Cash	5.8	5.9 (cash and receivables)	4.0 (cash and receivables)	2.9 (cash and receivables)	3.3	2.3	1.2	0.5	1.8
Receivables	10.7				2.7	3.1	2.8	0.9	1.9
Inventory, materials, supplies, etc.	19.7	1.7	1.2	1.0	1.1	4.7	3.0	......	2.8
Sundry	2.0	5.0	6.7	[4]8.2	1.2	....	[5]8.0	[6]9.5	3.2
Liabilities									
Common stock	33.0	28.9	32.8	27.6	34.9	45.0 (common and preferred)	38.0 (common and preferred)	46.0 (common and preferred)	30.0 (common and preferred)
Preferred stock	13.6	9.7	10.4	7.4	3.7				
Bonds and mortgages	12.1	41.5	45.0	46.8	28.4	[7]17.3 4.5	35.0	30.0	43.0
Notes payable	7.5 (notes and accounts payable)	2.6	1.7	2.7	1.2	20.0	1.1	2.3	5.2 (notes, accounts payable, accrued taxes)
Accounts payable		2.9	1.8	2.2	1.8 (accounts payable and accrued taxes)	2.2	3.0	1.8	
Accrued taxes, dividends, etc.	1.9	1.7	0.9	3.7		0.4	1.2	0.5	
Reserves	8.4	6.2	4.2	5.0	18.5	4.0	16.0	5.5	5.3
Sundry	0.7	1.6	0.2	1.9	2.7	2.8	3.0	[8]10.6	3.2
Surplus	22.8	4.7	3.0	2.5	8.7	5.5	4.0	3.0	13.3

[1]As a few unimportant items are omitted, the sum of the details will not always be equal to 100 per cent.

[2]Including 3.7 intangibles.

[3]Electric assets of gas companies included.

[4]Includes 2.9 per cent deficit.

[5]Unamortized discount.

[6]Including 5.5 unamortized discount.

[7]Premium on capital stock.

[8]Appreciation of property.

which submit to their stockholders data sufficient to fill a fair-sized book. Lack of completeness in presentation or of standardization in form of presentation is due sometimes to ignorance, sometimes to carelessness, and sometimes to differences in judgment.

Further, the nature of the business itself necessitates the use of different types of accounts by different types of business. The balance sheet of a retail store will in many respects inevitably be much different from that of a mining or manufacturing company, while between the two latter there will be further outstanding differences. In the same type of industry,

also, the accounts may differ to a great degree because of the size of the business or its peculiar methods of doing business. The balance sheet of a large corporation will not correspond to that of an unincorporated enterprise and the balance sheet of a large holding company organization or an integrated industry will in many respects look different from that of a simply operated concern. Also, those companies whose financial statements are not audited by certified public accountants will develop many anomalies and peculiarities which tend to be avoided by the use of audited statements.

All of these considerations must be borne in mind by the student who wishes to make a careful study of the financial problems and the financial performance of different types of industrial concerns. What would be a perfectly satisfactory balance sheet for one business or industry might, for particular reasons, indicate a very unsatisfactory financial condition for another business.

Again, it is important to note the time of year covered by the statement, since the actual condition represented by a statement drawn up, for example, as of December 31, may be vastly different from the true condition of the same concern either three months earlier or three months later. Frequently statements are dated at a time when the company's condition appears most favorable, though there is a growing tendency to make the fiscal year and the calendar year coincide. This fact, therefore, should be carefully considered when any attempt is made to compare statements of similar concerns having a dissimilar date.

Finally, the period in the *business cycle* is of outstanding significance in connection with the study of a corporation's accounts. Due to the changes in business conditions which affect in a vital manner not only the fixed assets of a business but even more particularly the make-up of its current assets, the statement which for a given company indicates a perfectly sound condition at one stage of the cycle, might, under changed circumstances, indicate approaching failure, even though the relative proportions of the balance sheet items had remained practically unaltered.

The balance sheets of industrial concerns are further lacking in uniformity because of the varying dependability of the figures actually given. This may be termed a difference in the "substance" of the accounts rather than in the form. Dissimilarity in "substance" can be accounted for in a number of ways.

1. In the first place, the method of arriving at the final figures is highly significant. The concern which audits its own statements may conceivably reach a far different result from that which would be found by a reputable accountant. Also, accountants themselves, depending upon their policy and practice, may report the condition of a given concern as of a given date in an entirely different manner. Some audits are *real,* so that the statements presented indicate closely the actual condition. Other audits are merely *pro forma,* and are carried out perfunctorily, or the accountant may merely find what the concern wishes him to find and may permit his name to be used more or less as a rubber stamp.

2. In the second place, the purpose of the financial statement too frequently influences its form and substance. For example, it is not only quite conceivable, but it frequently happens, that companies will present their accounts in one way for the tax collector's benefit, and in quite a different manner when they wish to raise additional capital from investors, or to borrow from the bank. It is not extremely difficult to shift a point of view when a great deal of money can be saved thereby.

3. Again, the interpretation of a balance sheet will be greatly influenced by the frequency with which a company issues a statement of its financial condition. Financial statements which are a year old may depict a condition utterly unlike that which actually exists in the business at the present time. It is important, therefore, to read between the lines and, in view of the general business conditions, properly to discount those items which in the meantime may have been most vitally affected. Old statements really furnish very little clue to the present condition of a business.

4. Finally, it is well to remember that even though statements are frequently made, and even though the intentions of

the company may be of the best, the human quality of judgment must be reckoned with. Very different conclusions are frequently arrived at by perfectly honest and capable men from the same basis of physical fact. Few fields present a wider range for the exercise of individual judgment than that of industrial depreciation. In many cases, therefore, different values may be given to the same assets, or the self-same material may be combined in such different ways as to make the resultant accounts appear wholly dissimilar.

5. Above all, the student must reckon with the fact that the average business man tends to be optimistic about his own financial condition, and this optimism is naturally reflected in the financial reports which he personally puts out, or which are prepared for him. Probably the borrower can scarcely avoid putting a more generous value on his assets than would appear to be warranted from the banker's point of view. His statement for the tax collector, as previously indicated, might be much more pessimistic in its presentation. Further, all figures given out for public consumption, either directly or indirectly, can scarcely be expected to discount the assets of a business or to inflate its liabilities. However, much progress toward more uniform industrial accounting has been made in the past few years as a result of the campaign of education carried on by bankers and by trade associations.

A. The Balance Sheet

It is wholly beyond the province of this book to give any detailed discussion of accounting methods and auditing procedure. Nor does it seem desirable at this time to make any minute analysis of the balance sheet of a specific company, since no one balance sheet is necessarily typical. On the contrary, some of the items more commonly encountered in studying the statements of the average concern will be briefly examined. For purposes of discussion the following "skeleton" is used, and arbitrary figures have been filled in merely to give the semblance of reality. Needless to state, the actual arrangement of items on the balance sheet may vary within wide limits. Some concerns list their "fixed" assets first while others put

them last. Similar differences are evident in the order of arrangement of liabilities.

ASSETS

Real estate, plant, equipment, etc.	$1,000,000
Patents and good-will	200,000
Investments	50,000
Treasury stock	25,000
Advances	100,000
Cash	75,000
Accounts receivable	200,000
Notes (bills) receivable	25,000
Inventories	300,000
Sinking or other special funds	15,000
Deferred (pre-paid) items	10,000
Total	$2,000,000

LIABILITIES

Common stock (10,000 *shares, no par value*)	$ 500,000
Preferred stock (*par* $100)	500,000
Bonds	150,000
Accounts payable	50,000
Notes payable	225,000
Accrued liabilities	25,000
Reserves	50,000
Surplus	500,000
Total	$2,000,000

Let us examine briefly the various items in the order of their listing, beginning with the assets.

1. *Real estate, plant,* and so forth, constitute the chief part of a company's *fixed assets.* It is very difficult to know exactly what may have been included under this head or whether the value assigned to the item is a correct one. Separate items should be given for real estate, buildings, machinery, equip-

ment, fixtures, and the like.[1] The figure recorded may be the original cost undepreciated; it may be an "appreciated" figure; or it may be merely an estimate based on the probable reproduction cost or arrived at in some other manner. Frequently this figure has been increased by "charging to capital," that is, including as an addition to the fixed investment, various improvements and repairs which should be provided for in operating expenses. During times of rapidly rising prices or just after the break in prices, many concerns have written up their "plant account" in order to make their financial position look stronger by increasing the surplus account or hiding an actual balance sheet deficit.

In many instances, also, too heavy "interest during construction," very high "organization" expenses, and losses incurred in the early years of operation, have been entered under this account as part of the original investment in the fixed assets, though this practise is from the accounting point of view a bad one. When promoters' profits have been high, it frequently happens that a plant has been built by a "construction company," which has then sold the property to the operating company at a nominal figure far in excess of the actual investment, receiving pay therefor in stock of the company, which is made "fully paid." Under such circumstances, it is frequently impossible to know the actual value of this item. However, if the accounts are honestly kept and properly presented, the "plant account" will no doubt record the actual cost of physical property to the company, lessened by reasonable depreciation allowances, unless the company has set up a depreciation reserve among the liabilities, which is invested in the plant.

It is rather refreshing to find that an ultra-conservative valuation policy is frequently followed among the New England textile mills. It has sometimes happened that the entire value of certain plants has been "written off" the books of the com-

[1] When large portions of a company's property are subject to exhaustion or depletion as a result of operation or utilization, it is desirable to carry such portion of the "fixed assets" in a separate account, sometimes termed "wasting assets." Most of the assets of mines, oil wells and timber companies are properly designated as *wasting assets* and should be "written off" by large amounts each year, depending upon the degree of utilization.

pany, even when this particular portion of property was operating with an apparently high degree of efficiency. By following this policy a *hidden reserve* is created, which adds greatly to the strength and relative earning power of the business.

2. The item of *patents, trade-marks, good-will* and other *intangibles* may mean much or nothing. A really "basic" patent will sometimes be of very great value to a concern. There are, however, extremely few basic patents at the present time. Further, the potential value of many a patent has been lost, due to the fact that companies in this country have failed to register their patents in foreign countries before some other concern has pirated the patent. It should be explained that in many European countries the ownership of a patent and the right to exact royalties for its use vests in the party who first registers the patent or trade-mark with the properly constituted public authorities. In this manner, it has in the past happened that some American companies have actually been forced to pay royalties for the use of their own patents and brands in European countries! Also, a patent that really has any present value may be ultimately contested in the courts, and so may prove of great expense and of doubtful ultimate value. The most conservative concerns, therefore, usually carry their patents at a mere nominal figure, often at $1.00.

The value of good-will, as indicated in an earlier chapter,[1] is also an uncertain element, practically non-existent for certain types of business, and subject to serious impairment at all times. There are exceptional cases in which the inclusion of this item at a high figure has been fully justified, but it is a safe rule to put a red line through "intangibles" as here listed when scrutinizing the balance sheet of a company for investment or credit granting purposes. That concern which places a high value on intangibles, particularly if it has not yet demonstrated excess earning capacity as compared with others operating in the same field, may prejudice its case in the eyes of the conservative financier. Modesty in this respect is by far the best policy. Conservative accountants maintain that no value should be assigned to intangibles unless they have actually

[1] See pp. 146, ff., Chapter VIII.

been paid for, and that even under these circumstances this account should gradually be amortized out of earnings.

3. *Investments* is a most uncertain and frequently misleading item. Under this head may be included such excellent securities as Liberty Bonds, securities with an uncertain market value, or securities which are wholly worthless. The investment, also, may have been made in some other company or business, or in property which has nothing whatever to do with the conduct of the main enterprise. Sometimes the item is largely padding, and serves as a catch-all for various incidental expenses incurred at the inception of a new enterprise or for advertising expenditures, and the like. This item, therefore, might be practically as good as a cash item, or it might be without any value. Supporting schedules are therefore necessary to know the exact nature of investments, how secured, time of maturity, and so forth.

4. The item, *treasury securities,* has been explained in another connection.[1] Unless the company has in some manner got back in its possession its own securities which were at one time issued and outstanding, this item should not be carried. Sometimes treasury stock is included in the assets merely to pad the balance sheet and represents "authorized" but "unissued" stock of the company. For purposes of analysis, therefore, the item may be properly stricken from the balance sheet.

5. *Advances* may mean almost anything. In the case of a holding company they probably represent sums of money lent to a subsidiary or even invested in another company with small hope of the return of the principal. In other cases "advances" may mean (though improperly) actual money paid in advance in order to secure the shipment of goods at some future time, the actual inventory not yet having been received. Some woolen manufacturers, for example, finance the season's wool crop in this way by advancing money to the wool grower. This item, again, needs to be carefully explained and should be interpreted with much diffidence in absence of evidence to the contrary.

[1] See Chapter V, page 105

6. The item of *cash* would seem to be so simple that it needs no explanation. Such, however, is not the case. It is very important to know how much cash is actually held by the company itself or by its bank. It is even more important to know whether so-called "cash items" have been included for padding purposes without any immediate prospect of their being turned into cash. There are many instances in which notes "payable on demand" secured from a "dummy" have been included in this item in order to make a more favorable showing. Sometimes, also, the same "cash" is counted twice—by the parent company and by a subsidiary. The actual proportion of cash needed for the successful conduct of a business varies so widely that no definite rules can be laid down. Further mention of this item will be made in the following chapter.

7. *Accounts receivable* probably represent money due from customers who buy on "open book account." This means that the record of goods sold to them and the prices charged are kept on the books of the selling company and that periodic payments of these accounts are made. This is the manner in which the average business is conducted. It is highly important, however, to know whether the accounts receivable are due or past due, whether they are merely "slow" accounts, or actually "bad" accounts. This fact can be revealed either through more detailed information or by means of a comparison of the accounts receivable with the volume of sales over a period of years. Also, if the accounts receivable are turning over very slowly as compared with the "turnover" of inventory, their "quality" may be questioned. Whenever accounts receivable become disproportionately large, it is probable that some of them are of doubtful value, or at any rate the collection methods of the company are unsatisfactory, as will be more clearly indicated in later discussions. In this connection, also, it is important to note whether any of the accounts have been "pledged," that is, whether they have been used as collateral for borrowing purposes. If so, a proper separation should be made and a corresponding liability entered on the other side of the balance sheet.

8. *Notes* or *bills receivable* may arise in many different ways. It may, perhaps, be the custom of the business, as is the case with agricultural implement companies, for example, to extend credit over a considerable period of time to their customers, taking from them notes secured by a lien on goods sold. The practise has also been common among the musical instrument manufacturers, certain types of publishing houses, automobile dealers, and the like. Under such circumstances one might reasonably expect to find notes receivable relatively high, as well as in the case of concerns which sell on the "instalment" plan. As a rule, however, this practise is not followed, and the notes or "drafts" have probably been secured from customers whose accounts are past due. In recent years this account is sometimes largely in the form of "trade acceptances." In other instances the notes have been given by officers of the company for reasons best known to themselves, or they may represent more or less permanent advances to subsidiary or affiliated companies. Sometimes the "notes receivable" are in part merely "accommodation" paper, gained through inter-company transactions. Such was the case in the now "famous" H. B. Claflin Company's "receivables," the use of which precipitated the company's failure. This item, therefore, is usually anything but liquid.

9. *Inventory* has perhaps occasioned more trouble on balance sheets than any other single item.[1] The number of opportunities for misrepresentation of its value are practically limitless. The usual rule is to carry inventory or merchandise at "cost" or "market," whichever is lower. This has hitherto been deemed conservative policy. However, in times when the prices of material are much inflated, it may be most unwise to carry inventory *either* at cost or market, because a break in prices may rapidly reduce the market value to a point much below any figure which may for the time being seem conservative. Many a large concern, stocked with heavy inventory, has suffered millions of dollars in loss due to the shrinkage in value

[1] For manufacturing companies the term "inventory" is more commonly used, while for trading concerns the term "merchandise inventory" or merely "merchandise," is preferred by some. No distinction between the terms is here made.

of this one item. A safer policy would seem to be at such times to keep the inventory at an artificially low figure which might well be the average cost over a period of years. In this manner the management of the company will have its attention constantly centered on the fact that prices will probably drop. How important this consideration may be, frequently depends upon whether or not a company can "hedge," that is, whether by buying and selling "futures," it can insure itself against loss in case of a drop in the selling price of its finished goods before its high cost inventory is worked off. This practise is generally followed by flour milling companies and frequently by cotton mills.

It is interesting to note that some of the more conservative textile mills follow a uniform practise of carrying their inventory at about one half its actual purchase price. In this way their financial condition is concealed and outsiders may be deceived, though no serious harm could result from the practise. Some manufacturing companies doing a large foreign business carry their inventories at an artificially depreciated figure, and hence have been subject to only small losses through "shrinkage" during the years of rapidly falling prices.

The actual amount of inventory which a company should have on hand depends on a number of considerations which will be touched upon in a later chapter.[1] A company which manufactures goods largely to order may safely carry an inventory higher than that of the concern which manufactures "for stock." The inventory at certain periods of the year will, for many businesses which are seasonal, naturally be much higher than at other periods. Likewise a company which is planning its business carefully ahead will tend to be cautious about stocking up with a large amount of material or merchandise at a time when it appears that prices have reached the "peak" and there is danger of a drop in trade. On the other hand, many a concern is forced to lay in an unduly large amount of material at certain times because of purchasing or transportation difficulties or because of the long period required

[1] See Chapter XIX.

for manufacture. All of these considerations need to be borne in mind when the inventory item is analyzed.

It should further be noted that the physical items may at times be very much "padded." Goods may be included which are wholly worthless from the market point of view, either because of their age and general deterioration or because of changes in demand, fashion, style, and the like. Some companies also include in their "inventory" various materials, supplies, tools, and the like, which are essential to the operation of their machinery and the general conduct of their business, but which do not at all, as raw material, enter into the making of goods. Other companies have been known to sell goods to an affiliated concern and still carry the goods sold in their inventory account, defending their practise because of the fact that the parent company owns the affiliated company. In this manner they may have padded their accounts in two ways, first, by increasing their accounts receivables or cash account, and secondly, by keeping the merchandise figure at an inflated point.

It is very important to know how the inventory is made up, and how it has been valued. There should be detailed items under this head, indicating at least the value of raw material, work in process, and finished product. There is a vast difference between actually "counting" the inventory and merely "guessing" at it, as so many do. It should be clearly indicated that the item does not include those supplies or materials which are being used by the plant in its ordinary course of operation or are being used for construction purposes. Such items should be included either in the general plant account or in a "new construction" account. Upon the whole it may be said that if the inventory appears to be growing larger from year to year or forms too large a proportion of the "current" assets, a serious situation is probably developing in the company.

Still another caution is needed in the examination of the inventory account, in order to guard inflation of the current assets. Some concerns which sell goods on *consignment* to dealers, receiving in return a note therefor, but retaining legal title to the property, increase their "notes receivable" and de-

crease their inventory proportionately. This is a thoroughly unsound practise as it is problematical whether the goods will be sold, and profits have not in any sense been realized. In some instances, also, companies have padded their current assets by including "profits" in inventory, on the assumption that the finished goods would soon be sold and, therefore, may properly be valued at the present selling price. This is a wholly dishonest and misleading procedure.

Finally, it is very important to know whether a company is under "commitment" to purchase goods in the future, and, if so, the time when the purchases are to be made. Many a business in post-war years has found that its liabilities incurred through contracts to purchase goods have been sufficient to drive it into bankruptcy because of falling prices. Though an actual transaction has not been carried out, the contract may be of so binding a nature that "commitment" to purchase is almost equivalent to inventory purchased at a stipulated price. "Contingent" inventories are frequently very dangerous from the financial point of view.

10. The item of *sinking funds and other special funds* largely explains itself. When a concern has bonds or notes outstanding, or even preferred stock, they are frequently issued with sinking fund provisions which make it necessary for the company to retire them in certain amounts at stipulated intervals. A fund, therefore, may be created for the purpose, into which a definite flat sum or a certain percentage of the annual earnings will be paid from year to year. Other actual funds are sometimes set up to provide against bad debt losses and the like.

11. *Deferred items,* sometimes entered in balance sheets as *prepaid* items, may cover a number of transactions, usually unimportant, though sometimes, as in case of the railroads, they may be for large amounts. For an industrial concern, however, this item usually covers such things as prepaid rent, insurance, and the like, or certain operating expenses properly chargeable to a series of years rather than to a particular year, or something of the sort. *Suspense* items are included herewith, meaning small items which have not yet been assigned to

their proper classification. It has sometimes been said that deferred assets are assets only "by courtesy." They are, as a rule, neither current nor fixed.

In this connection, attention should be called to another item which is sometimes lumped with deferred assets, but which more properly is carried under a separate head. The reference is to *bond* or *stock discount*. When securities have been sold for less than their face value, a balancing entry of this sort should be made on the asset side of the company's financial statement, and the amount should be as soon as possible written off out of earnings, that is, the discount should be made good by putting back into the property, from profits realized, enough to make up the difference between the money actually received through the sale of securities and the capital liability incurred by the company in selling those same securities at a discount.

12. In concluding this hasty survey of the various asset items, it should not be forgotten that while many companies return for public purposes a much more detailed statement than the one indicated, there are even more which do not give even this amount of information. It frequently happens that the plant account is lumped together with good-will and other intangibles in such a way that it is utterly impossible to secure any line on the true situation. Very frequently, also, cash and accounts receivable are grouped together, and in many cases all of the current assets, that is, cash, accounts receivable and inventory, are returned as one item. Whenever a balance sheet is reported in this way, it is perfectly permissible for the student to put the worst possible interpretation on all the figures given.

LIABILITIES

The important liability items of the average balance sheet are not, as a rule, so numerous as the counterbalancing items among the assets. The items above listed demand only brief consideration.

1. The *capital stock* of a company is listed among the liabilities on the assumption that as the corporation is a legal entity,

it would, upon *liquidation,* or dissolution of its business, owe to the stockholders or owners whatever remains after all other obligations have been met. It is obvious, therefore, that whether or not the stockholders would in such a case receive the full par value of their stock, or less, or more, will depend very largely upon the character and amount of a company's liabilities as well as upon the valuation which has been placed upon its assets. The nature of the business and the possibility of selling the assets in case of liquidation will also vitally influence the situation. As most industrial concerns might find it very difficult indeed under a *forced* sale to realize much, if anything, on their fixed assets, and inasmuch as the average industrial concern frequently issues common stock merely to capitalize intangibles, it is obvious that the actual equity of the stockholders may be very thin indeed. The real value of the stock of a manufacturing or trading concern at a given time, therefore, depends on earning power rather than on asset value, and par value has nothing whatever to do with the situation.

Many companies on their publicly circulated balance sheets do not even take the trouble to separate common and preferred stock. In the example given, however, the separation has been made and we find that the common stock issued has no par value. This type of stock has already been explained.[1] In this case, a value of $50 per share has been given to the stock for balance sheet purposes. If the records have been properly kept, that will mean that the stock was actually sold for $50 per share. On the other hand, it frequently happens that when no par stock is issued, a company, not wishing to reveal the issue price, will put a wholly arbitrary value on the common stock. In other instances the stock is carried at its approximate market value—a very absurd practise. Sometimes, also, no surplus account is indicated, and the reported value of the no par stock is simply the net worth of the business belonging to the common stockholders, about which more will be said presently.[2] Needless to state, the balance sheet should show as a liability

[1] See pp. 92-96, Chapter V.

[2] See pp. 313-314.

only the stock which has actually been issued and not any which has been merely "authorized" by the company's charter, though not issued.

If the preferred stock of the company is not fully covered by tangible assets after current liabilities and bonded indebtedness have been subtracted, there is usually good reason to fear that the company has been overcapitalized. It will then be very necessary to get a line on the earnings of the business over a period of time, and to find out whether preferred dividend payments can readily be met. The recent issues of preferred stock carry with them rather stringent protective provisions which may cause serious difficulty for the company if dividends are not paid within a reasonable time.

2. *Bonds and notes* explain themselves. From the point of view of the investor or the banker, however, it is highly important to know when these funded obligations are coming due, and what provisions, if any, are being made for paying them at maturity. Many a concern has found itself facing bankruptcy because of the fact that, due to unfavorable business and financial conditions, it has become impossible to meet these maturing obligations.

It is further important to note the relation between these items and the fixed assets of the business on the other side of the balance sheet. While the average industrial concern does not issue mortgage bonds in normal times, many have recently been forced to borrow by means of first mortgage bonds. In this connection it should be remembered that the mortgage customarily covers only the real estate, plant and equipment of the business, and does not include in its lien any of the current assets. If, therefore, the mortgage obligations exceed about 50 per cent of the reported value of fixed assets, it becomes a matter for serious consideration, since as a rule mortgages on real estate and industrial properties are not acceptable to investors unless at least this much margin is maintained. Finally, there is danger that the plant account may be inflated merely for the purpose of affording an apparently sufficient equity for bonds issued. General experience has led to the conclusion among conservative financiers that the average industrial enterprise should probably not cover more than a

third of its fixed assets by means of bond issues, if, indeed, it should issue bonds at all. No definite rule, however, can be laid down, since the nature of the property and the business itself will have much to do with the situation.

3. *Accounts payable* merely indicate that the concern owes a certain amount of money on "open book" account. If "cash discounts" are being properly taken, that is, the prompt payment discounts which are offered by sellers for cash payment within a certain period of time, this item would normally be relatively small. Whether or not the item is dangerously large can be discovered by comparing it with the "cost of sales," bearing in mind the usual terms of sale for the goods purchased. There is no definite relation existing between accounts payable and accounts receivable. Normally a well conducted business would have relatively low accounts payable as compared with *notes payable,* since it is customary to borrow from the commercial bank in order to pay accounts promptly and thus secure the benefit of the cash discount. It is important to assure oneself, therefore, that accounts payable are not past due.

4. In analyzing *notes payable* the question should immediately be raised, "to whom are they payable, and for what purpose have they been given?" Several entries, therefore, should be made under this head. (*a*) Normally one will find promissory notes payable to the commercial banker, which have been discounted and serve as the basis of the ordinary commercial loan. (*b*) In the case of larger concerns these notes may at certain times represent "open market" borrowing, that is, promissory notes will have been sold to various banks through the agency of commercial paper houses or note brokers.[1] (*c*) Also there may be here included notes secured by collateral of many sorts, as well as (*d*) notes given to officers of the concern from whom money has been borrowed. (*e*) Finally the notes may cover the cost of goods bought on long time payments, or (*f*) they may represent acceptances signed, or (*g*) may have been given to take up past due accounts payable.

[1] See Chapter XVI.

It is necessary, therefore, to find out the nature of these notes, when they will be due, whether any of them are "renewals" or "over due," and how they can be met at maturity. As will be explained in a moment, there is a very vital relation existing between this portion of the liabilities and the current assets.

5. In studying this item, also, it should be remembered that *contingent liabilities* have been incurred whenever a company has discounted its trade acceptances or any of its notes receivable, has pledged its open book accounts, or has endorsed notes for others. Likewise a serious contingent liability is created when contracts for future purchases have been made, and when commercial letters of credit have been arranged for. Such liabilities, therefore, should be counted in this place, unless a separate heading appears on the balance sheet for "contingent liabilities" or some such entry.

6. *Accrued liabilities* represent that portion of interest, wages, rent, taxes, and the like, which, though not yet actually due, may in practise represent a current liability of the company which would probably have to be instantly met in case of liquidation. When general property taxes are imposed on the company, it is customary to include in this item the *pro rata* amount, according to the portion of the year which has elapsed since the end of the last tax period or since the company's last payment. Sometimes dividends declared but not yet due are included, as well as a proportionate amount of the preferred stock dividend. Many companies, however, fail to report accrued liabilities on their balance sheets and may accordingly seriously misrepresent their actual condition. Some, however, combine this item with accounts payable.

7. *Reserves* is a very vague term. Ordinarily, however, when this item appears on the balance sheet it may be supposed to cover "reserves for taxes," which is actually a *current liability*, and probably "depreciation reserves." There may also be many other reserves set up for any purpose whatsoever, including bad debt losses, shrinkage in inventory value, drop in the market price of securities owned, and the like. If, therefore, this item of reserves appears on the balance sheet, there

should be several separate sub-heads indicating exactly the nature of the reserves. Reserves for taxes should, of course, always be kept separate so that they can be deducted from the current assets. So far as the other reserves are concerned, they usually represent a "hole" in the assets, and in order to find the actual value of the assets the proper deduction should be made.

A depreciation reserve normally indicates that the plant accounts have not been "written off," that is, have not been marked down from year to year according to some more or less definite scale of depreciation, but that from time to time an allowance has been made out of earnings for depreciation. There may be, of course, merely a bookkeeping transaction, cutting down the surplus account by so much and indicating that the assets have deteriorated to the designated extent. In absence of information to the contrary, it is well to put the most unfavorable construction upon all liabilities of this sort, as well as upon all current liabilities, since there is a natural tendency on the part of human beings to minimize their liabilities and magnify their assets.

8. Various sundry items may also appear on the liability side of the account, though they are not as a rule of sufficient importance to merit attention in this place. The *surplus,* however, is of considerable interest. In fact, few items on the balance sheet have been more misunderstood than the so-called "profit and loss" surplus. About the only definite thing that can be said of the surplus is that it represents the difference between the reported assets of the company, as shown on the balance sheet, and the reported liabilities, including the outstanding stock. Upon analysis, it will be found that very frequently, when the intangible items have been deducted from the assets of the company, the surplus is completely wiped out and the liabilities actually exceed the assets. Then, of course, it becomes necessary to write in a red ink figure to balance, known as the profit and loss *deficit.* What, then, are the sources of a corporate "surplus." It may arise in several ways:

(*a*) The surplus may be the result of earnings reinvested in the business.

(*b*) It may arise through the sale of new securities at a premium.

(*c*) Some companies, particularly banks, have actually started operations by having a premium paid in on their capital stock. Such a practise gives an appearance of strength and does not in any way interfere with the return to the stockholder, since he merely receives higher dividends on a smaller number of shares. The actual return on his investment is not changed.

(*d*) Certain fixed property may have been sold at a profit, that is, at a price higher than was carried on the books of the company. The gain in cash or other items resulting therefrom would naturally be balanced by an increase in the surplus account. This is by no means a usual method of securing a surplus.

(*e*) The company may for a number of reasons have thought it best to secure a reappraisal of its plant and property, as a result of which, in a period of high prices, it has been possible to show a very considerable increase in the surplus account. Some companies have added to their assets in this way in order to make a better showing in connection with new security issues. Yet it rarely happens that an industrial concern is justified in following this practise. So sedate a body, however, as the California Railroad Commission has permitted public utilities under its jurisdiction to *appreciate* assets in this manner, though the situation is not analogous to that which exists in the industrial field. Although it cannot be denied that in many cases the actual reproduction value of a thoroughly efficient plant may at the present time be from 50 per cent to 100 per cent more than it would have been 15 years ago, conservative business practise, except in rare instances, is much opposed to handling matters in this way.

(*f*) When the form of organization has been changed from a partnership or individual ownership to a corporation, very frequently a surplus is created through a partial capitalization of intangibles, particularly of good-will. More frequently it happens that when a consolidation has been made between two or more companies, the intangibles have been highly valued,

usually overvalued, and a surplus account has been built up in this manner.

(*g*) A not infrequent method of creating a surplus is through the "scaling down" of a company's capitalization. This can be effected by exchanging a fewer number of shares of preferred stock carrying a higher rate of dividend for a given amount of stock bearing a lower dividend rate. Sometimes, also, in order to save a company from reporting a balance sheet deficit, stockholders are called upon to turn in a portion of their shares for cancelation. This has very frequently happened during the period 1921-1922 even among the larger corporations. The result is that capital liabilities are decreased and a surplus created, or augmented, so that to all intents and purposes the company's financial condition may be sound, even though before the cancelation of the stock assets may not have exceeded the liabilities. To illustrate, if in the above balance sheet 50 per cent of the stock had been turned in for cancelation, the assets could be balanced only by adding $250,000 to the surplus. In practise, if all the stockholders sacrifice a proportionate amount of their shares in this fashion they have not changed their financial position in the least. The company's standing has not been strengthened nor has the owners' position been weakened. They still have the same relative ownership position in the business, though the property is for purposes of stockholding theoretically divided into a smaller number of certificates of ownership. If the business proves successful they will ultimately merely receive a higher rate of dividends upon a smaller number of shares.

In view of the foregoing considerations, it is certainly inadvisable to jump to any conclusions regarding the meaning of the balance sheet surplus. A well-managed corporation, therefore, should indicate the source of its surplus. Some companies make a distinction between the "capital surplus" which has resulted from money actually paid in by stockholders in premiums or which has been originally paid in on stock, and surplus which has been built up out of earnings. It seems more logical, however, if the surplus has been secured through the sale of

securities, to carry a separate item of "premiums" on stock and bonds. This is the policy followed by Massachusetts public utilities, and it will be noted in the table given [1] that the premiums on capital stock of the Massachusetts gas companies amounted to nearly 40 per cent of the par value of their stock. Needless to state, the surplus, if an actual one, may be scattered any place throughout the tangible assets of the company.

As has already been stated, there is absolutely no standardization in the balance sheet forms used by typical industrial concerns. Nor does it seem probable that any standardization will soon be reached. The Federal Reserve Board, however, in collaboration with the Federal Trade Commission, has tentatively recommended the following form of balance sheet (Form 8) to be secured by member banks from those concerns whose paper they may wish to rediscount with the Federal Reserve Banks. Though this form is subject to a good deal of criticism, it is here presented merely on its merits as indicating one important step toward greater uniformity in accounting procedure.

FREQUENTLY USED BALANCE SHEET TERMS

At this point it may be desirable to explain by means of illustrations some of the balance sheet terms which have been occasionally used in earlier chapters and which will constantly recur in the pages which are to follow. In the following chapter more detailed attention will be given to some of the important balance sheet relationships.

1. The term *fixed assets,* sometimes referred to as the "fixed capital" of a business, refers to the "permanent investment" of a concern in real estate, plant, equipment, fixtures, and the like. This is that part of the investment in the business which year in and year out assists in carrying on the enterprise. These assets themselves, however, are not the subject of periodic purchase and sale. The term is by no means a satisfactory one, since it is usually necessary for purposes of analysis to include among the fixed assets various investments, ad-

[1] See Table 23, page 288.

ASSETS.

Cash:
- 1a. Cash on hand—currency and coin
- 1b. Cash in bank

Notes and accounts receivable:
- 3. Notes receivable of customers on hand (not past due)
- 5. Notes receivable discounted or sold with indorsement or guaranty
- 7. Accounts receivable, customers (not past due)
- 9. Notes receivable, customers, past due (cash value, $....)

Less:
- 13. Provisions for bad debts
- 15. Provisions for discounts, freights, allowances, etc.

Inventories:
- 17. Raw material on hand
- 19. Goods in process
- 21. Uncompleted contracts
  Less payments on account thereof
- 23. Finished goods on hand

Other quick assets (describe fully):

Total quick assets (excluding all investments)

Securities:
- 25. Securities readily marketable and salable without impairing the business
- 27. Notes given by officers, stockholders, or employees
- 29. Accounts due from officers, stockholders, or employees

Total current assets

Fixed assets:
- 31. Land used for plant
- 33. Buildings used for plant
- 35. Machinery
- 37. Tools and plant equipment
- 39. Patterns and drawings
- 41. Office furniture and fixtures
- 43. Other fixed assets, if any (describe fully)

Less:
- 45. Reserves for depreciation

Total fixed assets

Deferred charges
- 47. Prepaid expenses, interest, insurance, taxes, etc.

Other assets (49)

Total assets

LIABILITIES.

Bills, notes, and accounts payable:

Unsecured bills and notes—
- 2. Acceptances made for merchandise or raw material purchased
- 4. Notes given for merchandise or raw material purchased
- 6. Notes given to banks for money borrowed
- 8. Notes sold through brokers
- 10. Notes given for machinery, additions to plant, etc.
- 12. Notes due to stockholders, officers, or employees

Unsecured accounts—
- 14. Accounts payable for purchase (not yet due)
- 16. Accounts payable for purchases (past due)
- 18. Accounts payable to stockholders, officers, or employees

Secured liabilities—
- 20a. Notes receivable discounted or sold with indorsement or guaranty (contra)
- 20b. Customers' accounts discounted or assigned (contra)
- 20c. Obligations secured by liens on inventories
- 20d. Obligations secured by securities deposited as collateral
- 22. Accrued liabilities (interest, taxes, wages, etc.)

Other current liabilities (describe fully)

Total current liabilities

Fixed liabilities:
- 24. Mortgage on plant (due date ....)
- 26. Mortgage on other real estate (due date)
- 28. Chattel mortgage on machinery or equipment (due date ....)
- 30. Bonded debt (due date ....)
- 32. Other fixed liabilities (describe fully):

Total liabilities

Net worth:
- 34. If a corporation—
  - (a) Preferred stock (less stock in treasury)
  - (b) Common stock (less stock in treasury)
  - (c) Surplus and undivided profits

  Less—
  - (d) Book value of good-will
  - (e) Deficit
- 36. If an individual or partnership—
  - (a) Capital
  - (b) Undistributed profits or deficit

Total

Suggested Form for Auditor's Statement

I have audited the accounts of Blank & Co. for the period from .... to .... and I certify that the above balance sheet and statement of profit and loss have been made in accordance with the plan suggested and advised by the Federal Reserve Board and in my opinion set forth the financial condition of the firm at .... and the results of its operations for the period.

(Signed) A. B. C.

FORM 8. Form of Balance Sheet Recommended by Federal Reserve Board

vances, and supplies which are currently renewed. Intangible values which have been paid for are also a part of the "fixed" investment. Obviously, therefore, the "property" or "plant" account, a term sometimes used with a similar meaning, should be divided into "tangible" and "intangible" items for purposes of analysis, if intangibles are carried.

2. *Current or quick assets,* sometimes called "floating assets," normally cover cash, accounts and notes receivable, inventory, and readily marketable securities, such as Liberty Bonds and treasury certificates, which are regarded as cash items, since used merely for temporary investment purposes when the company has a surplus of funds.[1] Some accountants, however, make a distinction between current assets and quick assets on the assumption that while all of the above-mentioned items may be "current," not all run with equal swiftness, some being much more liquid than others. In fact, analysis may show that only the cash and a portion of the accounts receivable are really "quick," in the sense that they immediately furnish means for the payment of liabilities. Obviously, notes receivable may be anything but quick, as they have perhaps several months or even a year or more to run before falling due, depending upon the nature of the business. Inventory, also, may be a most non-liquid asset at certain times and at any rate may be subject to much greater shrinkage than would be the case in the other current asset items. It is well to remember, however, that inventory conservatively valued, particularly if much of it is in the form of readily marketable raw material, may really be a more liquid asset than notes receivable or even than accounts receivable. There have been many cases during the past two years when accounts receivable have in large proportion proved to be either an utter loss or have turned back into finished "inventory," when those to whom the goods were shipped refused to receive or pay for them. Under such circumstances, through this circuitous route receivables may become almost utterly worthless, as the market for finished goods returned or recovered may have utterly evaporated.

[1] Recently some embarrassed companies have been including as a current asset the cash surrender value of the insurance policies carried on the lives of the principal officers!

Some accountants make a further distinction between "working" or "trading" assets and current assets, the former term being used to cover the various inventory and material accounts of a manufacturing company, while the latter refers to the merchandise inventory of a trading or distributing concern which does not manufacture goods.

3. *Current* or *quick liabilities* include accounts payable, notes payable, reserves for taxes, and accrued accounts. Some would even include under this head long term securities maturing within a short time. It is, of course, well to bear such maturities in mind as they very vitally affect the financial position of a company. It is not customary, however, to include among the current liabilities any obligations which extend for more than one year. Many "contingent" liabilities should also be added under this head in analyzing the credit position of a concern. These "contingent" liabilities arise in a multitude of ways, as previously indicated. Chief among them, for present purposes, may be mentioned liabilities arising from commitments or contracts to purchase material, liabilities arising through the discount of notes receivable and trade acceptances or through the pledging of accounts receivable, and liabilities resulting from the endorsement or guaranty of notes or other papers of some other concern, perhaps of an affiliated organization.

4. The *current* (or "quick") *ratio* is simply the relation existing between current assets and current liabilities, the former term usually being used as the first term of the ratio. In the typical balance sheet used, therefore, the current ratio is $600,000 divided by $300,000, or 2 to 1. As it happens, the ratio commonly insisted upon by bankers for purposes of credit granting is this "2 to 1" ratio. To it more attention will be given in the following chapter.

5. The *net current assets* or *working capital* is the term frequently used to denote the free quick assets or the difference between current assets and current liabilities. In the above example, granting that there is no reason for increasing the liabilities or decreasing the reported assets, the working capital would accordingly be $300,000.

6. The *total net assets,* more commonly called the *net worth,* are found by deducting from the total assets all liabilities other than the liabilities to the owners, that is, all except capital liabilities. Since the surplus belongs to the stockholders it is naturally included with the capital liabilities. In our example, therefore, the net worth of the business appears to be $1,500,000. Since, however, the intangible items and treasury securities are probably only so much padding—at all events this is true of the latter—they should be deducted from the assets, whereupon the net worth becomes $1,275,000. For an unincorporated concern the net worth can be arrived at by a similar computation. Approached in another manner, the net worth can be found by adding the surplus, premiums on stock, if any, and the par value of the outstanding stock as carried on the company's books.

7. The *book value* of any outstanding security is found by dividing the amount of the assets theoretically left to satisfy claims of the owners of that security after all senior obligations have been satisfied, by the amount of the security. To refer again to the example given, it is probable that the $300,000 of current liabilities would be met in case of liquidation before the bonds would be paid, since, if the bonds issued are secured by a mortgage, the lien will probably be placed only on the fixed assets of the business. If, on the other hand, the bonds are a debenture issue and hence secured only by the general credit of the company, some current obligations might probably be given equal preference by the courts. We find, therefore, that without deducting the intangible assets and treasury securities, there would theoretically be $1,700,000 out of which $150,000 of bonds could be paid. Since, however, the reserve of $50,000 undoubtedly indicates that the plant account has depreciated by this amount, a corresponding deduction should be made from the assets. This would mean an asset value of $11,000 per $1,000 bond, or if the questionable items be deducted, the book value would be under $10,000 per $1,000 bond.

Carrying the analysis further, we find that after all precedent obligations have been met, there would be left $1,500,000

out of which the holders of preferred stock could be paid. This would mean slightly more than $300 per share of preferred stock (par value $100). Hence the book value of the preferred stock, not deducting intangibles, would be approximately $300. Finally, by the same process of analysis it will be found that there remains for the common stock, after all other classes have been satisfied, $1,000,000, including intangibles. This would indicate a book value of $100 per share for every outstanding share of no par value stock.

It is scarcely necessary to state that in an actual case of liquidation, no such amount would be realized for the common stock. In fact, it is quite conceivable that there would be nothing left for the common stockholder. In studying balance sheets, however, it is usually highly desirable to find out the "book value" of the stock so that it may be compared with the market value or with the offering price of new stock in the company.[1]

B. The Profit and Loss Account or Income Statement

Though it may be possible to derive much significant and useful information from a company's balance sheet, there are many vital questions which can be answered only if some data are given indicating the actual results of the company's financial operation throughout the year or over a period of years. Unfortunately, until very recently, it has not been customary for companies to give out such information, either because they feared that competitors might gain an advantage therefrom, or merely because of a desire to keep secret the actual earnings and expenses of the business.

[1] An examination of the balance sheets of more than 90 New England textile mills for the year 1918 showed some extremely interesting relations between the asset value of the various companies and their "market price." By market price is meant the actual selling price of the stock based on latest market quotations plus the face value of any notes or bonds outstanding. Eleven concerns were discovered in which the current assets alone exceeded the market value of the entire property, as measured by the prices of its securities! In one instance the reported value of the current assets was actually 55 per cent in excess of the security price of the company! In another case the cash and receivables amounted to 109 per cent of the "selling price" of the mill. Obviously some of these mills would have been a rare bargain for the analytical individual who could have discovered the situation at the opportune moment.

At the present time, therefore, one finds even less standardization in the form of profit and loss accounts used by the average business concern than in the balance sheet practise. It is perhaps easier for the company to misrepresent its true condition by means of an improperly constructed income statement than in any other fashion. Practically no two concerns publish their profit and loss data in a similar manner, and it is frequently almost impossible to draw any definite conclusions from the figures which are available.

Most companies which purport to give out information on their earnings, report only "gross profit," "net earnings" or some such item, without indicating at all how the figures have been arrived at. As a result, it is frequently impossible to determine how effectively the company is being operated. Sometimes, also, it is necessary in examining a company's financial condition to work backward through the yearly changes in the surplus account and the reported dividend payments, with a view to getting some line on a company's net earnings, though the analysis thus made may turn out to be rather misleading because of the constant uncertainty involved.

Even the terminology used by accountants with reference to the operating and profit and loss accounts is by no means standardized, so that the student is confronted by an additional difficulty when he attempts to find out exactly what these accounts mean. Further, practically every company is at times a law unto itself in these matters. However, the following terms are most commonly met with and the items in question are the ones which it is most important to know in analyzing the financial operations of a business:

Gross sales ("gross earnings," "gross income")
Net sales
Cost of sales
Manufacturing costs ("direct cost")
Selling expenses
General and administrative expenses ("overhead," "burden")
"Operating expenses"
Gross profit on sales ("operating profit")

Other income
Deductions from income ("fixed charges")
Net income ("net earnings," "net profits")

1. *Gross sales,* sometimes referred to as *gross earnings,* or even "gross income," is the item which indicates the aggregate selling price of all goods which have been sold or billed out before deductions have been made for outward freight charges, returns, allowances, adjustments, and the like. Sometimes one meets with the expression "gross revenues," which is occasionally used to include not only the annual sales of a company, but also income received from other sources such as investments, royalties, and the like. *Net sales* is the figure really desired by the one who is analyzing a financial statement, and is arrived at, as indicated, by making the proper deductions from gross sales. Usually, however, companies report for public purposes only the "gross" and not the "net," nor is there much uniformity in practise regarding the deduction of "cash discounts taken" from the sales figure.

2. The *cost of sales* usually means the actual cost to the company of the inventory which is disposed of during the year. In a merchandise business this would be found by adding to the inventory on hand at the beginning of the year all the purchases (net) during the year and subtracting from this sum the value of the inventory on hand at the end of the year. For a manufacturing business, *manufacturing costs* will normally be included, so that the cost of sales includes not only the net value of the material worked up into finished goods during the year, but also the *direct* factory production costs.

3. When the term *gross profit on sales* is used, it properly refers to the difference between net sales and the cost of sales. However, the term is frequently used in the sense of *operating profits,* which means the difference between the gross or net sales and the *operating expenses.*

4. *Operating expenses* normally cover all the expenses of operation, including "manufacturer's cost," "selling expenses," and "general" and "administrative" expenses. Much difference of opinion exists as to exactly what items should be included in "operating expenses," and what items should be re-

garded as *deductions from income.* For example, some accountants have included taxes, rent, insurance, depreciation, and the like, as part of the operating expenses, while others would consider all such charges as deductions from *income* along with interest payments. Those who maintain the first point of view usually refer to such items of expense as "burden" costs, or "overhead" costs, since they are a general burden on the business, frequently irrespective of the goods sold. Some also designate under this head, repairs, supplies to be used in connection with plant operation, expenses of supervision, and the like.

It seems scarcely necessary for our purposes, however, to open up a discussion regarding the theories of accountants. Suffice it to say that interest, taxes, rent and depreciation have hitherto generally been spoken of as "fixed charges" in the sense that they must ordinarily be met whether the business is actually operating or not. Practise, however, differs widely as to whether some of these items shall be included in operating expenses, since indeed, in the last analysis they are all a part of the cost of producing goods, or whether in presenting a company's profit and loss statement they should be separately deducted. There is, however, no essential difference of opinion regarding the treatment of interest. This much may be said. It is certainly easier for the student to discover how the financial affairs of a business are progressing if depreciation as well as interest and taxes are reported as separate items, and deducted from income. Also, since the enactment of the federal income tax law and the excess profits tax law, it is, of course, impossible for a company to determine before knowing its earnings what its taxes will be. When a general property tax was imposed, this difficulty did not arise.

5. Some companies report *net income* or *net earnings* before deducting the so-called "fixed charges." Others do not apply the term "net income" until all of these deductions, including *sinking fund* payments and the like, have been made. Careful scrutiny of the profit and loss statements is, therefore, necessary in order to determine what the several concerns mean by the terms which they use. Some companies use the term "total income" in the same sense in which others use "net income,"

while others use the former expression as synonymous with "gross revenues."

No phase of the study of business finance is more perplexing to the beginner than the irregular and erratic character of income statements, if, in fact, they are available at all. Not only are there no generally adopted standards or terms, but even when a similar *form* is used, the items which appear mean different things to different individuals who are responsible for preparing the accounts. Even when a company wishes to disclose its true condition it is possible that, through the unfamiliarity of its officers with proper accounting procedure, or through the inefficiency of accountants employed, the actual condition of expenses and earnings will not be revealed.[1]

However, if an intelligent and honest attempt is made to show the annual expenses and profits, the result should generally be acceptable, provided one is given sufficient information as to the manner of arriving at the result and as to the meaning attached to the terms employed. After this point the interpretation is merely a matter of common sense. The following brief form is used by a leading eastern bank in securing financial statements from its borrowers—it may be taken as typical of the essential profit and loss information required for credit-granting purposes and for general use in analyzing a company's affairs:

CONDENSED INCOME AND PROFIT AND LOSS STATEMENT FOR FISCAL YEAR ENDING ———

Costs and Expenses

Cost of material or merchandise consumed
Actual expense of conduct of the business, including rent, insurance, etc.
Salaries paid to officers
Interest on borrowed money, bonds, etc.
Bad debts charged off
Depreciation charged off
Reserved for federal taxes for current year
Net profits (after above charges)
Total

[1] See Appendix, Table 82, after page 806.

Income

From net sales
From investments
From discounts on purchases
From other sources (itemize)
Total

Surplus and Undivided Profits

Balance at close of previous year
Charges or credits not applicable to current year (include here federal taxes actually paid during the year)
Add net profits as above
Less dividends (preferred)..........per cent
(common)...........per cent
Balance as per balance sheet

As was indicated in an earlier connection, public utility operating accounts have reached a measurable degree of standardization. Obviously, however, it would be impossible to bring about any standard conditions among industrial concerns, since they are not centrally regulated as to their accounts and financing. Also there is such a vast difference between the nature of the operations of different types of industrial concerns, whether manufacturing, trading, or mining, or perhaps combinations of these three which are found in certain integrated industries, that even with the best system it would be difficult to arrive at uniformity of presentation and interpretation of specific items. However, the Federal Reserve Board has in this case also made interesting recommendations which have been adopted by many banks as the standard form which they require to be filled out by their borrowing customers whose notes they may wish to rediscount at a Federal Reserve Bank. This form is presented on the next page.

COMMONLY USED TERMS IN THE INTERPRETATION OF INCOME ACCOUNTS

For the reader's benefit a few of the more commonly used terms from time to time referred to in analyzing income statements are here mentioned.

Comparative statement of profit and loss for three years ending..........19

	Year ending—		
	19—	19—	19—
Gross sales	$	$	$
Less outward freight, allowances, and returns			
Net sales			
Inventory beginning of year			
Purchases, net			
Less inventory end of year			
Cost of sales			
Gross profit on sales			
Selling expenses (itemized to correspond with ledger accounts kept)			
Total selling expense			
General expenses (itemized to correspond with ledger accounts kept)			
Total general expense			
Administrative expenses (itemized to correspond with ledger accounts kept)			
Total administrative expense			
Total expenses			
Net profit on sales			
Other income:			
Income from investments			
Interest on notes receivable, etc			
Gross income			
Deductions from income:			
Interest on bonded debt			
Interest on notes payable			
Total deductions			
Net income—profit and loss			
Add special credits to profit and loss			
Deduct special charges to profit and loss			
Profit and loss for period			
Surplus beginning of period			
Dividends paid			
Surplus ending of period			

FORM 9. Form of Profit and Loss Account Recommended by Federal Reserve Board

1. The *operating ratio* is a term very frequently used in railway and public utility finance to denote the relation existing between operating revenues and operating expenses before the inclusion of any so-called fixed charges (interest, taxes, depreciation, sinking fund payments, and the like). This ratio is of very great significance in analyzing the financial strength or weakness of such an enterprise over a period of years, or for comparative purposes. In the case of industrial concerns, however, it is extremely difficult to use operating ratios because of the fact that there is so wide a diversity of practise regarding what shall be included as "operating expenses." Hence, a comparative use of such ratios may be wholly misleading. If, however, it is understood that operating expenses shall include manufacturing costs, selling, administrative and general expenses, and not the "fixed" charges, the ratio becomes very useful.

One must, however, be very cautious in drawing conclusions based on the operating ratio of an industrial company, not merely because of the difficulty encountered in securing a true ratio, but also because of the deception which can readily be practised in order to make the ratio appear favorable. Naturally, the lower the operating ratio, the stronger will appear the position of the company, inasmuch as lower costs will be indicated and there will be a wider margin of net earnings left for fixed charges, dividend payments, and the like. Hence, a company may be tempted to charge to the capital account many expenditures for operation, maintenance, and repair, which are properly operating charges, and which would, therefore, increase the operating ratio. In this manner a company can not only make its operating accounts appear unduly favorable, but will also apparently be increasing the value of its fixed assets, whereas in reality the true condition may be a most unfavorable one.

Attention should also be called to another practise which has not infrequently arisen in the case of those parent companies which control one or more subsidiaries. By selling the product or services of an affiliated company to the parent concern at a merely nominal figure, it is possible to make it appear that the

profits of the former are very low indeed, or that it is operated at an actual loss, while the latter will apparently be making huge profits due to its low cost of material. Then "advances" may from time to time be made by the parent company to its subsidiaries which may be carried by the latter as a loan without maturity, while it will sometimes be entered on the books of the holding company as a "note receivable" and may even find its way into the current assets! In this manner a full cycle of misrepresentation is set in motion which may be of little concern to anyone except those who own and manage the companies, unless by means of these transactions the grantor of credit is misled. If, therefore, operating ratios are to be used for purposes of analysis, it is extremely important to know about the ownership relations and affiliations of a company, and to discover, if possible, what managerial policy is followed.[1]

A study of various types of industrial concerns will reveal the fact that the operating ratio runs very much higher than in the case of public service corporations. Turnover of investment is usually many times as rapid. Since the fixed charges are really much lower, this ratio runs highest of all in those trading companies which make their profits on a large volume of sales and a rapid turnover of their investment. Under such

[1] A well-known example of a practise somewhat analogous to that just mentioned is furnished by the early history of the "anthracite" railroads. Holding companies were formed to own the railroad and certain groups of mines. With a view to bringing the "independent" mines into the same ownership very high transportation rates would be charged on the coal carried from the mines by the railroad company. In order to comply with the laws forbidding discrimination in rates it was, of course, necessary to charge the same rate to the company-owned mines as to the independents. This rate was frequently sufficiently high to discourage further independent operation. In the meantime, however, the railroad would be making very high profits because of the high transportation rates received. In order to deliver coal to the ultimate consumer at a fair price, it was frequently necessary for it to be sold at a merely nominal price at the mouth of the mine. Accordingly, many of the controlled mines appeared to be making no profits, while the railroads which carried their coal were able to pay extremely high dividends. So far as the holding company was concerned, the profits lost on the mines were made up by the increased profits of the railroads. It was merely a case of taking money out of one pocket to put into another pocket. However, one unfamiliar with the situation might be very much misled by a comparative study of the balance sheets of the subsidiary companies. One would apparently be making abnormally high profits while the other might be operating at a loss. In reality, however, both would be making only a fair return.

circumstances, while the margin left for dividends may apparently be narrow, it is spread over a much broader base and is ordinarily distributed to a smaller number of shares of ownership.[1]

2. The ratio of *net profits to sales* is frequently used to indicate specifically the comparative earning power of a business from year to year. A ratio of this sort can be computed at most any point from gross profits to net income. However, it is ordinarily most helpful to estimate the percentage relation existing between net income before fixed charges are deducted and the net selling price of the goods. In making this computation, also, one must watch for any misinforming handling of the accounts. The ratio of net income to sales can be made to look very large by a juggling of the operating accounts as above indicated.

3. The *turnover of inventory* is a term widely used and little understood. In popular parlance it means the ratio of sales (gross or net) to the inventory account reported on the balance sheet. Actually, however, such a ratio does not at all indicate the actual turnover of inventory. It is necessary to compare the "cost of sales" with the average merchandise throughout the year, in a trading business, to find out the turnover of merchandise. In a manufacturing business the ratio is usually computed by dividing the "cost of sales" (in the manufacturer's sense) by the average monthly inventory.

Again it is evident that even this computation is not altogether accurate since the average inventory may be composed of varying quantities of finished goods, partially finished goods, and raw material. The next step would be to compare the average volume in units of inventory held by a company, with the actual volume in units sold, whether or not in the original form. This would give a true comparison of physical quantities which would unmistakably show the turnover of goods. However, no such figure is available for the ordinary investigator, and hence the discussion becomes purely academic. It is, however, a serious mistake to divide the total selling price for the

[1] See Table 47, pages 558-559.

year by the inventory item appearing on the balance sheet and to label the quotient "turnover." Inventory does not include profits and therefore the ratio obtained would be much too high. In those trading enterprises where the customary "mark up" is known, a simple computation can be made in order to find the "cost of sales," when only net or gross sales are given. In a manufacturing business, however, this cannot so readily be done.[1]

If proper allowances are made, any ratio of "turnover" computed may be of some value even though definite figures cannot be obtained. If, for example, the high and low inventory during the year can be found and divided by two, it may be taken as an average inventory for practical purposes. Also, in a business which is not subject to seasonal fluctuations the balance sheet inventory may vary little throughout the year and hence may be regarded as an "average." On the other hand, the company frequently takes inventory at that time of year when the stock is lowest. In such cases the reported figure would again be misleading.

The "turnover of receivables" is a ratio frequently computed in order to find out whether accounts are being promptly collected or, in other words, how many months' business is "on the books of the company." Similarly the turnover of payables may well indicate how promptly a concern is paying its bills. Again, the "turnover of net worth" is sometimes used to indicate the activity of the owners' capital, while the "turnover" of the entire assets or of the "fixed" investment may indicate whether a business is over-expanding. When, however, the word "turnover" is used alone, it commonly refers to the turnover of inventory or stock. It is scarcely necessary to call attention to the fact that in the majority of cases neither net nor

[1] Group statistics show, however, that the "cost" of goods sold, in the above sense, was in 1919 a little more than 70 per cent of the gross income of all manufacturing concerns, though for the individual groups, with one exception (the printing and publishing business), this percentage varies from about 60 (in stone, clay and glass products) to more than 80 (in food products, liquors and tobacco). The actual cost of "material" *used* by manufacturing concerns averages about 60 per cent of the value of the product ("selling price") of all manufacturing enterprises, though there is a wide fluctuation depending upon the type of industry. These relations for specific industries are shown in Tables 26 and 47.

gross sales are published. Accordingly, it may be quite impossible to compute these ratios.

4. The *margin of safety* is a term frequently used, particularly by investment bankers, to indicate the remaining percentage of "net income available for interest or preferred dividend payments," after those payments have actually been met. For example, a concern which reports a net income of $100,000 available for the payment of $30,000 of interest, would show a margin of safety of 70 per cent with reference to the outstanding securities on which interest is being paid. A "margin" of safety of from 50 per cent to 75 per cent is expected as a minimum when bonds are issued, namely the "net income" available for interest payment, over a series of years, should average at least two or three times the amount of interest to be paid.

DEVELOPMENT OF THE USE OF FINANCIAL STATEMENTS

Not many years ago the complete financial statement was a comparative rarity, and audited statements were and still are comparatively few. Probably the disasters of the past two or three years have done more than anything else to impress upon bankers and business men the need of accurate and frequent financial audits carried on either by members of the organization itself or by certified public accountants. Both the Federal Trade Commission and the Federal Reserve Banks have through their influence and requirements done much to popularize the use of full balance sheets and income accounts for credit purposes. Naturally, also, the various organizations of accountants have lent their influence to this end. No doubt the requirements of the Federal Income Tax law have done much to educate many business concerns as to the need for a more careful keeping of their accounts and study of their financial data.

The benefits which arise from the use of proper financial statements in connection with credit granting should be sufficiently obvious. Chief among these may be mentioned the following:

(*a*) The careful preparation of such figures is of the greatest value to the borrower himself, since it calls to his attention the essential features in the financial conduct of his business. (*b*) Further, through the use of the statement, the banker acquires a better understanding of the business to which he is lending money so that he can offer more constructive assistance to the borrower. (*c*) The use of financial statements, in general, makes for a sounder and more conservative conduct of business.

From the point of view of all concerned, therefore, the frequent preparation and submission of statements is a great advantage. The only serious objection which can be urged against the submission of information is that the information thus disclosed may fall into the hands of a competitor and thereby work to the disadvantage of the company which has supplied it. There would really seem to be no other valid objection, if, indeed, *this* objection is ever valid. Other aspects of this matter will be discussed in connection with the subject of borrowing from the banks.[1]

In view of the undoubted desirability of submitting full financial information when a concern wishes to borrow money, it may be surprising to some who are unfamiliar with the situation, to learn that until the last ten years the average commercial borrower, outside of New York City and a few other financial centers, probably did not even give his banker a full balance sheet. Extremely few concerns supplied their bankers with definite sales figures. The audited statement was a rarity, and it was estimated that as late as 1917 not more than 10 per cent of the statements certified by public accountants were *really* audited statements. Rather, the accountants were following the practise merely of appending their signatures to the figures furnished by the company itself or of finding for the company the statement of condition which they wished to disclose.

The abuses arising from such a method of doing business need scarcely be pointed out. This situation in a measure resulted from the *competition* in banking, which made it comparatively easy for a borrower to secure a large amount of

[1] See pp. 381-392, Chapter XV.

credit without in turn giving the bank much information. Many well-known concerns have heartily refused to give out any figures whatever to their banks, while others have maintained the greatest secrecy, giving only fragmentary information. On the other hand, the practise also developed in this fashion because of the *inertia* of the banks themselves, because of their carelessness, or because they have underrated the significance of statistics as compared with the human element and psychological factors in credit granting. However, the horizon is gradually clearing, and many a concern which several years ago refused to give its bank a statement of condition or which at the utmost made such a statement only yearly, is now supplying full information sometimes as often as every six months or even more frequently. Further attention will be given to this question presently.

Naturally a commercial banker is concerned more about the current financial position of a business than about its fixed assets. Immediate solvency and ability to meet constantly recurring obligations or definite payments falling due, is of more signifiance than *ultimate* solvency, though the latter is sometimes most watched by the investment banker. A commercial bank in granting a loan, or a commercial paper house, usually will pay attention particularly to the sales, net profits, insurance policies (noting especially whether fire insurance is carried on inventory), the salaries paid, the general expenses of conducting the business, the turnover of stock, the promptness of collection and payment of accounts, and contingent liabilities. The current ratio of the company as well as its net worth will also be carefully examined. In addition much information of a less tangible sort should be called for.

Perhaps the accompanying balance sheet may be conveniently used in this connection to show in a general way the type of financial information on which the bank acts in granting loans. It will, perhaps, serve as a link between the preceding discussion and the more detailed examination which is to follow. It must not be supposed that the *average* bank manages to secure from its borrowers any such amount of carefully worked out information. This statement form is one of the best which has come to the writer's attention.

Form of Financial Statement Used by National City Bank of New York

CONFIDENTIAL

Federal Reserve Bank of New York, Statement Form, Amplified

CORPORATION

Statement of..

Business...Address...

To The National City Bank of New York

For the purpose of procuring credit from time to time with you for our negotiable paper or otherwise, we furnish the following as a true and accurate statement of our financial condition on ....19........ We agree to and will notify you immediately in writing of any materially unfavorable change in our financial condition, and in the absence of such notice or of a new and full written statement this may be considered as a continuing statement and substantially correct; and it is hereby expressly agreed that upon application for further credit this statement shall have the same force and effect as if delivered as an original statement of our financial condition at the time such further credit is requested.

(*Please answer all questions and fill in all blanks*)

ASSETS				
Cash on hand and in Banks				
Accounts Receivable for Mdse. sold				
Other Accounts Receivable				
Notes Receivable for Mdse. sold				
Other Notes Receivable				
Trade Acceptances Receivable				
Drafts against Foreign Shipments				
Merchandise—Finished				
Merchandise—Unfinished				
Raw Material				
U. S. Liberty Bonds				
Other Quick Assets (Itemize)				
Quick Assets				
Real Estate				
Machinery, Fixtures and Equipment				
Good Will, Patents, etc.				
Due from Officers, Employees, etc.				
Investments in Affiliated Companies				
Other Stocks, Bonds, etc.				
Deferred Charges				
Other Assets (Itemize)				
TOTAL				

LIABILITIES				
Accounts Payable				
Notes Payable to own Banks				
Notes Payable Through Brokers				
Notes Payable for Merchandise				
Notes Payable to Others				
Trade Acceptances Payable				
Due to Banks or Bankers for Foreign Credits				
Deposits of Money with us				
Labor and Salaries Account				
Reserve for Excess Profits, Income and Other Taxes				
Dividends Payable				
Other Current Liabilities (Itemize)				
CURRENT LIABILITIES				
Bonded Debt				
Mortgages and Liens				
Other Liabilities (Itemize)				
CURRENT AND DEFERRED LIABILITIES				
Capital Stock Preferred				
Capital Stock Common				
Surplus and Undivided Profits				
TOTAL				

Sales for..........months ended with date of this statement $..........

Surplus and Undivided Profits at beginning of period covered by this statement.... $..........

LESS:

Federal Taxes Paid.......... $..........

Reserves.......... $..........

Dividends Paid.......... $..........

Other Adjustments.......... $.......... $.......... $..........

Net Profits or Loss..........months ended with date of this statement.......... $..........

Total Surplus and Undivided Profits at close of period covered by this statement

This total should agree with amount shown in above Statement. $..........

Merchandise. On what basis valued, cost, market or selling price..........

If any merchandise is held on consignment, state amount and circumstances

Accounts and Notes Receivable. If any are past due or doubtful, state amount and circumstances..........

If any amounts are due from directors, officers, employees, subsidiaries, branches or similar sources, state amounts, security and circumstances..........

Stocks and Bonds. State general character and whether readily salable at value stated..........

Insurance. Fire, on Building $............................Machinery, Fixtures and Equipment $............................Merchandise $............................
Life in favor of Company $............................

....

On What Terms Do You Sell?............................

....

Contingent Liabilities.
Notes or Accounts sold with Endorsement $............................
Trade Acceptances Discounted $............................
Domestic or Foreign Bills Discounted $............................
Under Domestic or Foreign Letters of Credit $............................
As Guarantor on Bonds $............................
Accommodation Endorsements $............................
Other Contingent Liabilities (describe) $............................

....

Accounts and Notes Payable.
If any are past due, state amount and circumstances............................

....

During last fiscal year total current liabilities were at a maximum............................

....

($............................) on............................
and at a minimum ($............................) on............................
Mortgages and Bonds. State due dates of mortgages and on what assets a lien............................

....

State due date of bonds and on what assets a lien............................

....

Are mortgages or bonds a lien on any current assets?............................
If other liens on assets, state amounts and circumstances............................

....

Reserves and Depreciation. State what provision is made for past due accounts and notes receivable $............................For depreciation of merchandise $............................Land and Buildings $............................
Machinery and Fixtures $............................

We hereby certify that the foregoing figures are taken from the books of this Company and that they and the statements contained on both sides of this sheet are true and give a correct showing of the financial condition of the Company.

Signed this............................day of............................19........

Name..

By..

(*State official title*)

OFFICERS	DIRECTORS
............President	....
............Vice-Pres.	....
............Treas.	....
............Secretary	....

In what State incorporated?............

If company has any subsidiaries or branch offices state location and how accounts are handled............

....

What is practise of company in regard to taking cash discounts?............

....

At what other Banks do you carry accounts and what lines of credit do you receive?............

Bank Depositories	Lines of credit or maximum amount borrowed		

Do you sell notes in the open market?............

If so, please give the name of Brokers............

....

Do you obtain Commercial Letters of Credit?............

If so, from whom?............

Do you give notes for merchandise?............

Are books audited by a certified public accountant?............

If so, give name of accountant............

Give date of last audit............

Give date that Fiscal year ends............

Net worth of each endorser outside of his interest in this business............

....

....

Do they endorse other paper?............

Location and Description of Land and Buildings	Estimated Value			Assessed at			Mtgd. for			Insured for		

CHAPTER XIV

COMPARATIVE STATEMENTS OF CONDITION AND FINANCIAL STANDARDS

The importance and use of comparative financial statements—Reasons for differences in the financial "set-up" of different industries—Factors accounting for differences in working capital requirements—The current ratio and supporting ratios—Current assets minus inventory, ratio of sales to inventory, the ratio of sales to receivables, cost of sales and accounts payable, working capital and fixed assets, net worth and capital stock, ratio of sales to fixed assets, operating ratio, cash and current assets, sales and net worth, sales and working capital, net worth and working capital, receivables and merchandise—The fallacy of the current ratio—Financial standards for different types of industries—Desirability of increasing financial standardization and difficulties in the way of attainment.

THOUGH financial statements for a given year may convey a great deal of useful and highly important information to the one who analyzes them, yet conclusions based upon the records of such a brief period are in danger of being very misleading in many respects. When a well worked out income account is presented along with the balance sheet fewer errors in interpretation will be made. However, no satisfactory results can be achieved without studying the financial statements of a given concern over a period of years. The figures for any one year may not be typical of a company's financial performance. This may be true because of rapid changes in general business conditions or in conditions affecting the particular industry. There may, again, be unusual circumstances arising within the business itself because of changes in management or radical changes in policy. Also, it frequently happens that in a country so large as the United States the financial condition of concerns engaged in the same line of business will vary greatly according to the geographical location. Comparative financial statements, therefore, are an absolute necessity, particularly for the commercial banker who

makes frequent loans, as well as for the investor, and the seller of goods who extends mercantile credit.

If a balance sheet can properly be called a photograph of a company's financial condition at a certain date, a *series* of statements may be thought of as presenting a moving picture of the business. The tendencies which are revealed through a comparative study usually mean far more than any mere catalog of facts which at the very instant of their recording become ancient history. The business concern itself can, with much interest and profit, give a good deal of attention to careful analytical studies of its own evolution, based upon year-to-year comparisons. Most bankers at the present time are attempting to build up a file of annual or even semi-annual statements covering several years of the financial experience of those companies which borrow from them. Unfortunately, many bankers have failed to devote to this collection of information an adequate amount of analytical study. A sample comparative statement form which has been found very useful is presented herewith.

Again, no one can deal intelligently with the finances of a particular concern without being somewhat familiar with the financial condition of other concerns engaged in the same line of industry. The company, if intelligently managed, will probably gain even more by comparing its condition and performance with rival companies than by confining its studies merely to internal problems. Increasing opportunities are now being furnished which make possible such comparative analyses. The Harvard Bureau of Business Research, for example, is collecting operating and general financial statistics from an increasingly large number of retail and wholesale establishments throughout the United States, the composite analytical results of which are of great value to all members of the industry. Much of the data published by the Federal Census Bureau covering particular industries is also highly useful, as well as the belated information which is annually compiled by the Commissioner of Internal Revenue. Every comparative check which a business can get on itself should be of much value. Each concern, also, can profit much by studying the financial

operations and conditions of other lines of industry. No business can at the present time live wholly unto itself.

One who has not made a study of the situation may not realize how great are the apparent dissimilarities which, in certain respects exist between different companies and different industries. Some of these variations are due to the type of business, while others are largely influenced by the type of management. Even though it is true that one business with a certain quality of management may be able successfully to follow a policy which might prove the ruination of a competing company under a changed type of management, yet there are certain general financial principles and standards which should be adhered to by the typical concern in a given industry. Most essential financial differences encountered in the study of business finance are probably reducible to one general and underlying cause, namely, the difference in *working capital requirements.*

REASONS FOR DIFFERENCES IN WORKING CAPITAL REQUIREMENTS

Some of the more important factors affecting the amount of working capital needed by a business are here indicated.

1. The general type of business is in itself of much significance. A concern which because of the nature of its business must carry a large inventory will need relatively more working capital in order to keep itself fully protected. On the other hand, the working capital requirements of a coal mining company, for example, which practically never has inventory on its hands, are very low.

2. Those concerns which normally manufacture largely or solely after orders have been received, or which contract for the sale of their entire output, will need relatively less working capital than others engaged in the same line of business.

3. When, because of scarcity, uncertainty, transportation difficulties, or the like, it is necessary for a company to purchase goods far ahead of its immediate requirements, it will need a larger proportion of working capital.

Form 10, Insert VI

COMPARATIVE STATEMENT FORM USED IN GRANTING BANK LOANS

THE MERCHANTS NATIONAL BANK OF BOSTON, MASS.

NAME..

COMPARISON OF STATEMENTS

Quick Assets												
Current Liabilities												
NET QUICK												
Ratio												
NET WORTH (Less Good-Will)												
Contingent Liabilities												
ASSETS		INCREASE DECREASE		INCREASE DECREASE		INCREASE DECREASE		INCREASE DECREASE		INCREASE DECREASE		INCREASE DECREASE
Cash												
Notes Receivable of Customers												
Accounts Receivable of Customers												
Merchandise												
TOTAL QUICK ASSETS												
Land, Buildings, Etc.												
Machinery, Equipment, Fixtures, Etc.												
Patents, Good-Will, Etc.												
Prepaid Expenses												
Investments												
TOTAL SLOW ASSETS												
TOTAL												
LIABILITIES		INCREASE DECREASE		INCREASE DECREASE		INCREASE DECREASE		INCREASE DECREASE		INCREASE DECREASE		INCREASE DECREASE
Notes Payable												
Accounts Payable												
Dividends												
Reserve for Taxes												
Accrued Liabilities												
TOTAL QUICK LIABILITIES												
Bonds												
Mortgages												
Other Liabilities												
TOTAL LIABILITIES												
CAPITAL { Preferred												
CAPITAL { Common												
Surplus												
Profit and Loss (Undivided Profits)												
Reserve												
TOTAL CAPITAL Reserve, Surplus, Etc.												
TOTAL												
SALES												
Charges for Depreciation												
NET PROFITS (After Depreciation)												
Dividends or Withdrawals												
ADDITION TO SURPLUS												

4. A rapidly expanding business usually reports a relatively lower amount of working capital than a well-seasoned business in the same industry. This, however, is not usually a healthy condition and in most cases indicates overexpansion.

5. A business which is seasonal in its nature must have a larger proportion of permanent working capital than an "all year round" business. Nor can it borrow so freely from the banks.

6. The terms of purchase for goods bought will also influence the relation. A company to which liberal or long terms are extended, it being the custom of the trade not to press for prompt payment, can get on with a much smaller amount of working capital in proportion to its volume of business.

7. The terms of sale of the product are even more significant. A company which sells for cash does not need to invest its money in account or notes receivable and hence can economize on working capital. The briefer the terms of payment, the more favorable the condition from this point of view. As a rule, a company must give more favorable terms to its customers than it receives from those from whom purchases are made. Prompter collections and briefer terms have, however, ordinarily increased the working capital of many a concern threatened with serious financial difficulties. The more liquid the current assets, the closer they are to *cash,* the less working capital will be needed.

8. The length of time required to turn out the finished product has an important influence. In some lines many months or even a year is consumed between the purchase of the raw material and the emergence of the finished product. Such types of business must be liberally supplied with working capital.

9. Closely related to the foregoing is the "turnover" of merchandise. The more rapidly a business can keep its goods turning over, the more trade it can finance on a given amount of capital. Small unit profits and quick turnovers economize the use of capital and are the secret of many a financial success.

10. Another important influence is the number of different "lines" or kinds of products dealt in. Where it is necessary for a concern to carry many different kinds of merchandise in order to supply the trade, it will probably find some of the "lines" slow moving, and consequently more working capital must be locked up in inventory.

11. Some writers refer to the "volume of business" as having an important influence on the amount of working capital required. Certainly, it is true that a company actively operating and selling goods will need more working capital than a concern which is defunct or retrograding. However, the "volume of business" is merely a reflex of some of the other factors which have been mentioned. A concern which turns over its stock of goods rapidly and collects receivables promptly may do a large volume of business and still require much less working capital than another concern whose volume is far less, but whose goods turn slowly.

12. It is further important to note that in periods of great price uncertainty a larger proportion of working capital is absolutely essential to a business. Either when prices are very rapidly rising or rapidly falling, a concern can be sure of avoiding financial embarrassment only by conserving its capital and keeping a wide margin between current assets and current liabilities. The former are constantly in danger of shrinkage while the latter increase of their own momentum. When prices rapidly rise, a company's book profits apparently increase in a desirable manner. It will be found, however, that this increase of the "net worth" of a business at such times is wholly misleading, since more and more money is needed to lay in a supply of new inventory at the prevailing higher prices. As is well known, the price of finished goods tends to lag behind that of raw materials needed by the producer of those goods. Consequently at such times a concern should have a larger proportion of free and perfectly liquid capital in order to "ride" comfortably. In times of falling prices, also, inventories tend to shrink with fatal rapidity, and frequently become utterly frozen

as the market disappears. Receivables, too, become slow, while the percentage of bad accounts enormously increases. Under such circumstances, as well, the company needs a large free balance of net quick assets in order to protect its solvency. During periods of war, even though the general price movement might not be particularly marked, yet because of the decisive influence of military and political events upon certain classes of prices a larger proportion of working capital is needed for "insurance" purposes.

13. The relation of working capital to total assets or to fixed assets depends further upon (*a*) whether the company owns or leases factories or real estate, (*b*) whether the company does solely a manufacturing business or solely a distributing business, and (*c*) whether the concern is an integrated business, combining under one management several different stages in the industry. It will be found, for example, that such companies as the International Harvester Company normally carry a very high proportion of their assets in the form of working capital. In many lines of industry, such as candy making, shoe manufacturing, and the like, it is customary to lease buildings and in the latter case to lease machinery as well. Under such circumstances the fixed assets of the business will bear a very small proportion to the working capital. This is also a frequent condition in many retailing establishments.

The amount of working capital reported by different industrial concerns a few years ago varied from a minimum of less than 5 per cent of total assets to a maximum of more than 60 per cent.

Table 24 is particularly significant in that it shows the relation existing between gross annual sales and working capital ("net current assets") in 37 large industrial corporations of the United States.[1] The wide differences existing between the various industries are clearly shown by the ratio of "turnover." It does not appear that there is necessarily a noticeably close correlation between industries engaged in the same line of business. Much depends upon the factor of management. On

[1] These data were computed by a leading investment banking house.

TABLE 24

Relation of Working Capital to Gross Sales in Large Industrial Corporations (1918)

Company	Working Capital	Gross Sales	Turnover of Working Capital (Times per year)	Per Cent Earned Per Annum on Capital
Allis-Chalmers	$ 19,605,706	$ 35,031,234	1.8	11.12
American Beet Sugar	6,098,141	7,471,383	1.2	3.78
American Car & Fdry	36,044,187	121,839,328	3.4	10.62
American Hide & Leather	14,014,142	29,104,428	2.0	11.02
American Linseed	8,280,027	4,385,287	0.5	5.15
American Locomotive	26,300,675	59,480,026	2.2	7.33
Am. Smelt. and Ref.	54,014,990	392,001,155	7.3	6.04
Arlington Mills	13,816,109	48,476,355	3.5	25.87
Armour & Co.	155,471,245	861,000,000	5.5	8.70
Atlantic, Gulf & W. I.	11,850,131	50,350,198	4.2	20.13
Baldwin Locomotive	21,204,926	125,082,896	6.0	9.33
Bethlehem Steel	80,145,492	452,191,860	5.6	9.89
California Petroleum	2,002,149	4,154,354	2.0	4.82
Cent. Leather	75,934,104	94,147,418	1.2	8.02
Cluett, Peabody	8,211,569	21,490,554	2.6	8.13
Endicott Johnson	16,925,710	52,896,275	3.1	5.76
Fisk Rubber	11,302,879	36,682,164	3.2	8.31
Firestone Tire & Rubber	20,495,518	75,801,507	3.7	25.17
General Motors	124,038,205	326,044,756	2.6	7.55
Goodrich Rubber	43,024,620	123,470,188	3.0	17.65
Keith, Geo. E.	9,399,892	32,000,000	3.4	24.17
Marine, International Merc.	39,682,070	34,668,354	0.9	6.41
May Dept. Stores	9,641,818	41,179,261	4.2	12.61
McElwain	8,459,109	37,103,824	4.4	16.45
Mexico Petroleum	9,831,639	25,754,842	2.6	17.95
Montgomery Ward	20,876,558	76,166,848	3.7	18.54
Nashua Mfg. Co.	6,748,054	20,014,082	3.0	16.40
Peet Brothers	5,953,920	24,000,000	4.0	14.05
Procter & Gamble	44,803,057	193,392,044	4.3	40.75
Railway Steel Spring Co.	5,049,963	25,182,032	5.0	13.03
Sears Roebuck	24,251,546	198,523,080	8.2	13.17
Simmons Co.	8,835,594	18,288,068	2.1	10.05
Studebaker	21,751,733	52,087,997	2.5	8.31
Swift & Co.	117,983,446	1,200,000,000	10.1	15.50
United States Steel	485,354,599	1,744,312,163	3.6	11.00
Wilson & Co.	40,040,375	400,000,000	10.0	12.11
Woolworth Co., F. W.	17,799,815	107,179,411	6.0	11.17
Total	$1,625,243,713	$7,150,943,372	4.4	....

the other hand, there seems to be no definite relation existing between the turnover of working capital and the per cent earned on the capital stock. This fact is accounted for both by

TABLE 25

TURNOVER OF INVENTORY IN LARGE COMPANIES, 1921-1927

Industry	Number of Companies Reporting Sales	1921			1927		
		Sales	Inventory	Ratio of Sales to Inventory (No. times)	Sales	Inventory	Ratio of Sales to Inventory (No. times)
Autos and Trucks...	5	$ 491,325,001	$162,936,641	3.02	$1,574,413,089	$ 230,532,759	6.83
Auto Tires and Rubber Goods	5	390,217,269	153,803,230	2.54	649,885,618	202,081,641	3.22
Chemicals (Industrial)	3	14,514,336	8,544,720	1.70	49,242,769	13,417,723	3.67
Electrical Equipment.	3	382,003,910	159,550,505	2.39	543,787,149	165,740,697	3.28
Leather and Leather Goods.....	3	155,114,218	41,298,085	3.76	230,861,320	55,853,547	4.13
Machinery and Machine Equipment.	2	42,021,112	21,152,652	1.99	49,873,090	20,751,438	2.40
Meat Packing........	2	1,400,000,000	177,092,105	7.91	1,825,000,000	234,500,716	7.78
Office and Business Equipment.	2	40,275,229	9,003,159	4.46	64,028,106	11,186,218	5.72
Retail Trade	8	685,005,199	122,350,952	5.60	1,209,361,024	182,822,952	6.61
Sugar Producing and Refining...	7	123,587,514	46,304,420	2.67	123,639,916	24,606,521	5.02
Total	40	$3,724,063,740	$902,066,440	4.13	$6,320,092,070	$1,141,494,200	5.55

the nature of the business itself and by the makeup of its capitalization. The operating expenses also play an important part. Better methods of management during the past few years have made possible a greater volume of sales with a smaller investment in inventory and receivables. This has relatively cut down working capital requirements, as shown in Table 25.

THE CURRENT RATIO AND SUPPORTING RATIOS

Until recently many bankers and trade creditors have confined their analysis of financial statements almost solely to

finding out whether or not the "current ratio" is satisfactory. If a company's statement shows that current assets are at least twice as great as current liabilities, there has been a tendency to draw the conclusion that the financial condition is probably satisfactory. The post-war years have brought many wholesome changes in this regard, and many banks at the present time analyze their borrower's statements most unmercifully. However, one still hears more about the "two to one" ratio than anything else. It is probably true that the average banker, and certainly the average credit manager of a business concern, still looks little further than the supposed strength of the current position in deciding whether or not credit shall be extended. Much more attention must be given to the subject of credit analysis before the fallacy of a mere two to one current ratio will be sufficiently exposed.

In fairness it must be admitted that the customary "ratio" has proved of considerable value. It would not have been adopted as a standard had not ordinary experience indicated that it is of some significance. The general theory back of this "two to one" ratio is that current assets are always in danger of shrinking, and in case of liquidation of the business, might not realize more than 50 cents on the dollar. Cash and receivables, of course, if honestly reported, might ordinarily be sufficient in themselves to liquidate accounts and notes payable. Too frequently, however, this is not the case, and also inventory under such circumstances may prove to be anything but liquid. Even receivables may be far from liquid, depending upon the terms of sale in the business, the quantity of notes which have been taken from customers, and the usual promptness of collections. It must be remembered that notes receivable, while in theory they may be discounted, may not actually supply the cash needed to meet pressing liabilities until the urgency is too great. The rule of safety, therefore, has been to require the nominal 200 per cent current ratio before extending credit.

The adoption of this rule has tended to blind many to the fact that a ratio which is perfectly satisfactory in one type of industry may be wholly inadequate for another type. Further a ratio which is suitable for a well-seasoned business may by no

means fit an uncertain or rapidly expanding enterprise. A ratio which is sufficiently high at one period in the business cycle may be dangerously low at another period. Since, therefore, general business conditions, the nature of the business itself, the character of the management, the age of the business, and even its geographical location may vitally affect the current ratio, it becomes highly important to discover other relations which will throw further light upon this ratio, and particularly to examine the *quality* and not merely the *quantity* of the current ratio. The following may be suggested as "supporting" ratios which will enable the grantor of credit to form a more correct opinion as to the strength of the current position:

1. The ratio of *current assets minus inventory to current liabilities* is normally of much more value than the mere current ratio, since it is by means of the cash and immediately maturing receivables that current liabilities must be met. This ratio also gives the grantor of credit a more definite line on the "quality" of the current assets. A concern whose current assets are composed largely of inventory may, so far as its *immediate* solvency is concerned, be almost bankrupt. Further, inventory, depending upon its composition, may be subject to great fluctuations in value due to style changes, price changes, and the like, so that its dependability as a liquid asset is frequently open to serious question. There may also be in the inventory item a great quantity of old, worthless, and utterly "immovable" stock. The valuation of inventory, therefore, even when no deception is practised, is often largely a matter of individual judgment, and the borrowing concern usually tends to view with optimism this portion of the assets. Receivables, on the other hand, provided they are not padded by means of inter-company transactions or questionable notes, are *presumably* a much more definite quantity though, as stated, they may sometimes be "slow." It is desirable for a concern to have cash and receivables *at least* equivalent to its current liabilities.

2. Another very important relation is that existing between *sales* and *inventory*. As was explained in the preceding chapter, this ratio does not give a true statement of the turn-

over of inventory since the annual sales figure includes profit as well as cost. If, however, the cost of sales can be secured, the ratio furnishes a very definite index of the activity of a company's business as well as of the peculiar nature of its transactions. Some concerns which consume a great deal of time in the various processes of production must carry an inventory at all times almost equal to their total annual sales in physical volume, while others buy in relatively small quantities and turn over their stock very rapidly. As an example of the concerns with quick turnover may be cited the meat packing business. A similar situation is found in the grocery business, particularly among wholesalers. The average jobber or middleman also turns over his merchandise rapidly. On the other hand, manufacturers of heavy machinery, for example, normally require a long period for one turn of their inventory.

With some knowledge of the general situation in the industry, however, the grantor of credit is in a position to determine whether in a given concern merchandise is being sold with reasonable promptness. If, for example, it is usual for well-managed concerns in the trade to turn their inventory four or five times per year, a business which shows on its balance sheet merchandise sufficient for five or six months' sales will be open to serious question, no matter how favorable its current ratio. This situation, however, must be interpreted in the light of the business cycle; hence the value of comparative analyses of a company's turnover, covering a period of years. A poor ratio here may indicate unusually bad business conditions, as well as poor planning and lack of necessary foresight on the part of the management. The credit grantor, therefore, must carefully weigh the various causes which lead to an exceptionally high proportion of inventory.

In Chapter XXII will be found some interesting information regarding the stock turnover in various types of retail establishments.[1] Later in the present chapter will be presented figures indicating the "turnover" in the manufacturing business.

3. The ratio of *sales* to *receivables* is highly significant in that it shows pretty definitely the terms of sale in a given

[1] See Tables 60, 61, 62; pages 648, 649 and 650.

business, or the promptness of collections. If the terms of sale, as is usually the case, are known to the banker, he can determine immediately from an inspection of this relationship whether or not the company has a good collection department.[1] When the longest terms given are sixty days, presumably there should not appear on the books of the company receivables as high as two months' sales, since many customers would probably be paying their bills in a much shorter time in order to take advantage of the cash discount offered them. Accordingly, if a business reporting annual sales of $1,000,000, the terms of sale in the trade being 2 per cent cash, net thirty or sixty days, shows $300,000 worth of receivables, its credit position is immediately questioned no matter how attractive its other figures may be. The high proportion of receivables might, of course, be the result of adverse business conditions which have made ordinarily prompt customers very "slow pay." This was the 1921 situation in the fertilizer industry, due to the rapid decline in the prices of farm products which made it impossible for many farmers, particularly in the southern states, immediately to liquidate their bills. Some lines of business, such as agricultural implement companies, normally take notes from their customers or dealers which they carry for a long period of time, frequently from one to two years. The same condition arises when a business concern sells goods on the "instalment plan." In such cases the turnover of receivables may be extremely slow, and the borrower needs relatively more permanent working capital in his business, and should be able to show an unusually high current ratio because of the unliquid condition of a large portion of his current assets. A store which sells only for cash should have no receivables whatever in its current assets, which should be composed only of cash and rapidly turning merchandise.

4. The ratio of *cost of sales* to *notes and accounts payable* is important in that it gives a good line on the promptness with which a company pays its bills. This ratio is, of course, closely tied in with the current ratio, but if it appears that a com-

[1] For detailed information on "Terms of Sale," see Chapter XXIII, pages 680-684.

pany owes for several months' supplies when it is known that the terms of purchase are short, a danger signal is immediately raised. A "slow paying business" seriously injures its credit standing.

5. When sales figures are not available, it is sometimes profitable to compare a company's *working capital* with *the "total assets"* or the *"fixed assets"* of the business. In this manner a comparison of several years may be made which will indicate rather definitely whether a company has been expanding its fixed assets at the expense of its current position. Even though the business may have realized high earnings, a lowering of the ratio between working capital and tangible fixed assets may show that those earnings have been locked up in bricks and mortar or have been too generously paid out in dividends, while expansion has been provided for by borrowing. In either case the situation resulting may be one of great weakness from the credit point of view.

6. The ratio of *net worth* to *tangible assets, total assets* or *capital stock* is also worth examining. It is a wholesome sign to find this ratio increasing, for it indicates that the owners are relatively increasing their investment in the business. An increase of the equity of stockholders or proprietors indicates both good financial management and confidence in the future of the business. Conservative management, at any rate, demands that the net worth shall more than cover the fixed assets of a business so that the owners will have supplied that proportion of working capital which may be regarded as the "permanent" working capital of a business. The wider this coverage, the stronger normally will be the credit rating of the business, for the equity of the owners is proportionately increased. As the ratio of net worth to capital stock increases, it is of course evident that the book value of the stock is increased.

7. By examining the ratio of *sales* to *tangible "fixed" assets* over a period of years it is readily possible to determine the direction in which a company is tending. For example, when the plant account, investments in subsidiaries, and the

like, increases more rapidly than the volume of sales in dollars, an unmistakable red flag is raised, for it is probable that the concern is overexpanding. A striking instance of this sort is furnished by the history of the Goodyear Tire and Rubber Company, which about 1916 began rapidly to increase its fixed investment out of proportion to its immediate volume of business. There was a further startling increase in 1919 to such an extent that the volume of sales, which in the year 1918-1919 had amounted to four times the fixed assets, was in 1919-1920 only twice as great, in spite of the fact that there was an actual dollar increase in sales of about 20 per cent during 1920.

8. The *operating ratio,* that is, the relation of the total expenses of operation, including the cost of material or "factory costs," selling expenses, general expenses and administrative expenses, to the net sales, can frequently be examined with some profit. It has already been discussed in the preceding chapter.

Provided one could be certain of the manner in which operating accounts are kept, this ratio would be of the utmost significance in determining the relative efficiency of one business as compared with another engaged in the same line of industry, or as compared with its own past performance. It will be found that the variation in this ratio is extremely wide, ranging highest for those types of business which have a very rapid turnover of inventory, such as the meat packing or wholesale grocery business. In 1919, for example, the operating ratio of one of the large packers was almost 99 per cent. The average manufacturing concern will have an operating ratio not far from 80 per cent, assuming this to mean ratio of "cost of sales" to net sales. The average for all manufacturing enterprises in the United States for the year 1909 was 89.2 per cent, interest and depreciation being included as expenses. The ratio of total expenses, of all kinds to total receipts, from *all* sources, was for all corporations in 1926 about 93 per cent.

The ratio of *gross profits* to *sales* is merely 100 per cent minus the "operating ratio." After deducting interest, depreciation, property taxes, and miscellaneous charges, from "gross profits," we have left *net profits*—sometimes called *net income.*

However, provided the basis of comparison is decided upon, it is not necessary to quibble over the use of such terms. The Census of Manufactures gives fairly complete information which makes possible the computation of many ratios for the different types of business.[1] The annual analyses prepared by the United States Commissioner of Internal Revenue, based on corporate income tax returns, supply extremely valuable information for all types of incorporated businesses. At this point, therefore, the latest material available is presented without further comment. (Table 26.)

9. The ratio of *net income* to *net worth* is significant, and more informative than the ratio of net income to capital stock or to sales. It is very important, therefore, if possible to find out how much a company is earning on the owners' equity in the business.

10. The ratio of *cash* to *current assets* or to *current liabilities* is sometimes of considerable significance in estimating a company's immediate solvency. Money must be constantly paid out for wages, as well as to meet maturing accounts and bills. Hence a concern which is not liberally supplied with cash may have some difficulty in securing its equivalent, credit. Since the bank customarily requires the maintenance of a 20 per cent deposit balance,[2] and since the average company which borrows from the bank does so in order to take its cash discounts and reduce its accounts payable, the amount of cash in the current assets should normally be at least 20 per cent of the current liabilities or approximately 10 per cent of the current assets. This ratio will, of course, depend upon a multitude of other considerations as well as on the size of the current ratio itself. A concern not borrowing from the bank will present many anomalous situations, but in the active business which borrows heavily it will usually be found that cash will amount to from 10 per cent to 15 per cent of the current assets. A minimum of 5 per cent or 6 per cent and a maximum of 25 per cent or 30 per cent may be met with in specific cases.

[1] For a detailed tabulation based on the Census figures, see Chapter XX, Table 47.

[2] See page 406, Chapter XV.

TABLE 26

Percentage Distribution of Corporation Income and Deductions by Industrial Groups, 1926

(Each item expressed as a per cent of tot: l receipts)

Industrial Group	Total Receipts from All Sources	Cost of Goods Sold %	Interest Paid %	Depreciation %	Depletion %	Taxes Other Than Income Tax %	Miscellaneous Expenses %	Total Disbursements %	Net Profits %	Income Tax %	Net Profits after Income Tax %	Cash Dividends %	Left for Surplus %
Agriculture and Related Industries	100%	53.61	3.53	3.76	1.49	3.12	31.81	97.32	2.68	0.94	1.74	3.74	2.00*
Mining and Quarrying	100	57.30	2.12	5.11	6.01	2.28	19.24	92.06	7.94	1.25	6.69	8.83	2.14*
Manufacturing:													
Food Products, etc.	100	80.27	0.98	1.47	0.01	0.52	12.61	95.86	4.14	0.57	3.57	2.43	1.14
Textiles and Products	100	80.68	0.98	1.78	0.04	0.74	13.99	98.21	1.79	0.51	1.28	2.39	1.11*
Leather and Products	100	80.91	0.78	1.04	0.07	0.61	13.65	97.06	2.94	0.56	2.38	2.00	0.38
Rubber and Products	100	78.07	1.84	1.88	0.01	0.57	14.56	96.93	3.07	0.30	2.77	2.58	0.19
Lumber and Products	100	73.41	1.61	2.58	1.82	1.33	15.45	96.20	3.80	0.71	3.09	4.05	0.96*
Paper, Pulp and Products	100	71.74	1.70	3.28	0.06	1.11	15.09	92.98	7.02	0.94	6.08	3.40	2.68
Printing and Publishing	100	50.18	0.96	2.12	0.01	0.77	38.02	92.06	7.94	1.01	6.93	4.78	2.15
Chemicals, etc.	100	60.41	1.14	4.07	1.92	1.43	19.59	88.56	11.44	1.27	10.17	6.72	3.45
Stone, Clay, Glass	100	64.83	0.96	3.85	0.14	0.84	18.49	89.11	10.89	1.53	9.36	6.08	3.28
Metals and Products	100	70.17	0.94	2.66	0.15	0.97	15.87	90.76	9.24	1.28	7.96	4.81	3.15
All other Manufacturing	100	67.03	0.85	1.99	0.01	0.74	22.49	93.11	6.89	0.96	5.93	4.70	1.23
Total Manufacturing	100%	71.98	1.05	2.41	0.40	0.89	16.52	93.25	6.75	0.93	5.82	4.06	1.76
Construction	100	69.44	1.12	1.95	0.02	0.48	22.59	95.60	4.40	0.68	3.72	1.96	1.76
Transportation and Other Public Utilities	100	...	8.29	4.87	0.17	3.70	68.92	85.95	14.05	1.55	12.50	8.63	3.87
Trade	100	79.11	0.60	0.60	0.01	0.43	17.05	97.80	2.20	0.34	1.86	1.28	1.58
Service — Professional, Amusements, Hotels.	100	.....	2.39	6.85	0.02	1.68	83.73	94.67	5.33	0.92	4.41	3.72	0.69
Finance — Banking, Insurance, etc.	100	.....	12.79	1.94	0.06	3.15	69.25	87.19	12.81	1.27	11.54	7.74	3.80
Grand Total	100%	57.83	2.80	2.29	0.40	1.32	28.69	93.33	6.67	0.86	5.81	4.17[1]	1.64

*Deficit.

[1] In addition 0.53 per cent was paid in stock dividends, leaving only 1.11 per cent of total receipts or 19 per cent of net after taxes, to be put back into the business as "surplus."

11. Many other relationships are of interest, though not so significant as some which have already been mentioned.

(*a*) The ratio of *sales* to *net worth* indicates the activity of the owners' investment in the business. A high ratio may indicate that a concern is trying to do too much business on too thin a margin of the owners' capital, and over-use of credit. Or it may indicate great economy and skill in operation—an exactly opposite situation! This ratio alone, therefore, is not conclusive, but must be interpreted in the light of some of the preceding ratios.

(*b*) The ratio of *sales* to *working capital* is also sometimes used. Though this ratio is extremely interesting it is rather difficult to see that in itself it conveys useful information. Studied comparatively over a period of years for a single company it will, however, throw a good deal of light on the financial policy. As has previously been mentioned, there seems to be no very definite relation between the *turnover of working capital* and the *net income* of the business.

(*c*) The ratio of *net worth* to *working capital* has sometimes been thought important. Some bankers wish to see the net worth from two to three times as high as the working capital. The higher this ratio, the stronger is the owners' position; but considered alone the relationship does not indicate whether the owners' net worth has been kept in a sufficiently liquid condition.

(*d*) The ratio existing between *receivables* and *merchandise* has occasionally been considered significant for certain lines of business. It is undoubtedly true that there are instances in which an increasing proportion of receivables may, unless the current ratio has increased, indicate a weakened credit position, inasmuch as the receivables may be less liquid than inventory which has a ready market. At times, also, depending upon the general business situation, an increase in this ratio may indicate inflation and a weakened credit position, since more *book* profits thus appear in the current ratio. In general, however, this is not a conclusive ratio.

THE FALLACY OF THE CURRENT RATIO

As a result of the foregoing suggestions it becomes perfectly obvious that a "two to one" ratio of current assets to current liabilities can be regarded as not more than a mark to "shoot at." As a matter of fact it really means almost nothing. There are conditions under which a "ten to one" ratio would be thoroughly unsafe as a basis on which to make bank loans; there are other circumstances under which it might be safe to make such loans when the ratio falls almost as low as "one to one." Among the determining factors which should influence the credit grantor as to his current ratio requirement, will be such considerations as the following:

1. The *type of business* is important. A low ratio has sometimes been found satisfactory for meat packers, millers, and cotton mills. This is due partially to the great salability of the raw material composing their inventories, and in certain instances to the rapid turnover of inventories. For cotton mills the standardization of equipment and readily realizable value of fixed assets may affect the situation. In the case of millers and cotton manufacturers, the fact that they can protect their purchases and their market by *hedging* operations may be very significant.

2. Those concerns which produce or deal in *fashional* goods, luxuries or novelties are normally subject to a great deal of risk as a result of changes in demand. Hence they will be expected to show a high current ratio. In some cases it is even difficult for them to secure banking accommodations under any circumstances. On the other hand, a business supplying only staples with stable values is ordinarily considered a good risk and will not be expected to show a high current ratio.

3. The *stage* of the industry in which a concern operates has also influenced credit requirements. Normally, the retailer has not been considered a good credit risk because of the lack of financial and managerial experience which is customarily found in the retailing business. Most anyone can enter this line

of business without previous training. Many prejudices have arisen in connection with the classification of businesses from the credit-granting point of view, some of which are wholly unwarranted by the facts. However, the normal ranking is probably about as follows: those companies which supply basic raw material to the manufacturer, manufacturers whose turnover of stock is rapid or who can protect themselves by hedging operations, responsible wholesale houses, manufacturers whose turnover is less rapid, jobbers, retailers.

4. The *age* and *experience* of the borrowing concern will also influence the ratio requirements. An established business which has demonstrated its capacity to make money can ordinarily borrow with a lower current ratio than a new concern which must still demonstrate its ability to make good. Frequently, wholly unwarranted discrimination arises in this manner inasmuch as an old concern may have its current assets full of antiquated inventory and dubious receivables. A new business, on the other hand, will not have had an opportunity to accumulate so much "trash," although it may have acted unwisely in overstocking itself with goods or in extending credit to doubtful customers in order to increase its sales.

5. The *stage* of the *business cycle* is perhaps one of the most significant factors of all in determining the value of the current ratio, though this influence has customarily been largely overlooked. In times of inflated prices or in periods immediately following abnormal prosperity the value of the current assets will be subject to great uncertainty and shrinkage. Even at the best, both inventory and receivables become non-liquid after the peak of an industrial crisis. Therefore, with a view to protecting the business itself as well as those with whom it has dealings, a higher ratio requirement should be imposed in times of rapidly increasing prosperity, so that it might be possible to avoid many of the difficulties which accompany the period of depression. In the latter period, as the "quality" of the current assets has deteriorated, it is usually necessary to insist on a greater "quantity." Further reference will be made to this interesting matter in the following chapter.

6. The human element of *management* is always prominent, if not foremost, in the mind of the credit grantor. He will,

therefore, be disposed to require a lower ratio from a concern in whose officers he has the utmost confidence than from one whose management is not so highly rated by him. Here again there is a possibility for much prejudice and favoritism to enter in. Accordingly, it has frequently been said that more attention should be paid to statistical considerations in granting loans. The writer has, therefore, given a good deal of attention to the construction of so-called "credit barometers" and to detailed investigations with a view to determining whether there are definite *financial standards.* To this subject brief attention will now be directed.

Financial Standards

Are there any "financial standards" which may serve as a guide to the credit man or which may be used by a company in order better to administer its internal finances? Unquestionably, within certain limits such standards can be ascertained. The bankers themselves have, no doubt, tended to impose certain standard balance sheet relationships upon the companies which borrow regularly from them. Accordingly, the larger companies whose financial statements are constantly scrutinized, have tended to adjust their affairs so that the suggested relationships shall usually be shown upon their balance sheets. If, for example, a "two to one" current ratio requirement is imposed, the tendency will naturally be for borrowing concerns to approximate this ratio. If their ratio is poor, they may not be granted a loan; and the chances are that if the bank requires nothing better, they will be content to use their working capital in such a way that a higher ratio will not be shown.

Doubtless, however, the great majority of small and medium-sized business concerns either do not borrow from banks at all or borrow so infrequently that their finances tend to be solely an individual matter. For such concerns it would probably be extremely useful to have certain definite financial standards which might serve for their guidance. However, these standards could hardly be discovered from a study of this group of companies, because their financial "set-up" is in itself far from "standard." On the other hand, if a sufficient number of

samples are taken, it is probable that the average results may point to desirable and readily attainable *maximum* and *minimum* limits, so far as the various financial relationships are concerned.

After what has been said in the preceding chapter and in the first part of the present chapter it is scarcely necessary to point out the manifold difficulties encountered by the student who wishes to discover reasonable financial standards in different types of industry. These difficulties arise at every step in the investigation.

1. The *time of year* when the financial statement is made must be carefully scrutinized, as the financial condition is constantly shifting. At certain seasons of the year, in some lines of industry inventory is practically "cleaned out." At other times "receivables" are very low, because it is the custom in the trade to pay bills at periodic intervals. Further, the current obligations run much higher at one time than another. Hence, in making comparisons, even within the industry itself, it is essential that comparable times be chosen. Otherwise analyses based upon individual financial statements may be wholly misleading.

2. The *form of organization* may also be of considerable importance, particularly in so far as it affects the fixed investment and the capital liabilities. Unincorporated enterprises very frequently finance themselves in a manner rarely followed by corporations. Also, the financial methods of a holding company, or a horizontally or vertically combined business, will be essentially different from the methods of simpler organizations carrying on the same line of activity.

3. The *age* of a business will also probably have a considerable effect upon its financial "set-up." It would obviously be unfair to compare the statements of a new business with those of a company which is well established.

4. The *geographical location* may be different. Trade practises and business conditions vary markedly in different sections of the country, particularly among small enterprises and trading businesses.

5. Differences in *size* may also lead to important differences in the financial statement. A very large concern will probably have its investment distributed in a manner not found in the case of the smaller business. Necessary relationships frequently change with the volume of the business and the extent of the plant.

Without further preliminary discussion, a few tables are presented in the remaining portion of the chapter in order to give the reader some suggestions as to the financial relationships which may normally be expected in different types of industry, as well as to point out the difficulties encountered in attempting to formulate any definite standards.

Table 27 is of general interest inasmuch as it indicates the average financial condition found in typical manufacturing companies. The first group consists of 402 companies with average total assets somewhat in excess of $15,000,000,[1] while the second group is composed of 57 much larger concerns whose average assets are more than $81,000,000. The United States Steel Corporation was not included in the 1918 group of large corporations, but is in the 1925 group of 59 companies, which also includes 5 large trading companies. It is interesting to find that although the two groups at the earlier period vary markedly in average size, their general balance sheet relationships are almost identical in essential respects. The smaller companies appear to have carried relatively somewhat higher inventories and receivables. The large companies, on the other hand, as is to be expected, show relatively higher "intangibles" and a higher proportion of investment in securities and in subsidiaries. Among the liabilities it is natural to find that the larger companies show a somewhat higher proportion of funded debt, though there is no essential difference in the relative amount of their accounts and notes payable. The only marked difference is found in the surplus item. This, however, is explained largely by the fact that the smaller companies frequently did not report reserves, which after all are merely bal-

[1] The basic figures relating to this group of 402 companies were collected by the Committee on War Finance of the American Economic Association, and are here analyzed by the writer.

TABLE 27

COMPARISON OF BALANCE SHEET RATIOS IN THREE GROUPS OF INDUSTRIAL COMPANIES

Assets	Amount (Unit, $1,000,000)	Per Cent of Total	Amount (Unit, $1,000,000)	Per Cent of Total	Amount (Unit, $1,000,000)	Per Cent of Total
Plant Account	$2,538	41.6	$1,938	41.8	$6,346	49.2
Intangibles	385	6.3	430	9.3	470	3.7
Investments	382	6.3	430	9.3	1,150	8.9
Cash	314	5.1	252	5.4	743	5.8
Receivables	887	14.5	547	11.8	1,383	10.7
Inventory	1,538	25.2	988	21.3	2,545	19.7
Sundry	67	1.0	55	1.2	262	2.0
Total	$6,114	100.0	$4,641	100.0	$12,899	100.0
Liabilities						
Capital Stock:						
Common	$3,116	51.0	$1,279	27.6	$4,260	33.0
Preferred			971	21.0	1,752	13.6
Funded Debt	465	7.6	500	10.8	1,559	12.1
Payables:						
Accounts	772	12.7	410	8.8	974	7.5
Notes			207	4.5		
Accruals	106	1.7	48	1.0	241	1.9
Reserves	...	....	347	7.5	1,084	8.4
Sundry	105	1.6	38	0.8	89	0.7
Surplus	1,548	25.4	841	18.1	2,940	22.8
Number of Companies	402		57		59	
Average Assets	$15,250,000		$81,420,000		$218,640,000	
Date	*1918*		*1918*		*1925*	

ance sheet items, but combined their reserves with the surplus. Allowance having been made for this fact, the two groups report practically the same proportion of surplus, or about 25 per cent of total assets. It is rather significant to find that the only important changes in tendency shown by the 1925 figures—not all of which are the same companies as in 1918—is a decrease in the proportion of intangibles and of preferred stock.

Table 28 analyzes the figures returned to the Commissioner of Internal Revenue. It is highly interesting to find that the current ratio approaches "4 to 1," for manufacturing companies rather than "2 to 1"—the latter being more common in trading companies. An analysis of the composition of the current assets shows that scarcely half is in the form of inven-

TABLE 28

Financial Ratios, 1926
(359,449 Corporations)

Type of Industry	Current Assets+Tax Exempt Securities							Inventory		Invested Capital					Fixed Debt		
	Per Cent of Current Liabilities	Per Cent in Cash	Per Cent in Tax Exempts	Per Cent in Notes Receivable	Per Cent in Accounts Receivable	Per Cent in Inventory	Per Cent of Fixed Assets	Per Cent of Fixed Assets	Per Cent of Current Liabilities	Per Cent in Bonds and Mortgages	Per Cent in Preferred Stock	Per Cent in Common Stock	Per Cent in Surplus	Surplus—Per Cent of Common Stock	Net Current Assets—Per Cent of Bonds and Mortgages	Per Cent of Fixed Assets	Net Worth—Per Cent of Total Debt
Aggregate	291%	24.0%	12.4%	9.6%	24.0%	29.9%	71.8%	21.5%	87.1%	15.5%	12.2%	47.9%	24.5%	51.2%	211%	22.4%	260%
Agriculture and Related Industries	92%	12.7%	4.3%	18.8%	32.7%	31.5%	30.0%	9.5%	28.9%	8.2%	7.0%	69.8%	15.1%	21.6%	.....	9.2	246%
Mining and Quarrying	234	19.4	14.2	7.2	29.0	30.2	26.4	8.0	70.5	10.8	5.8	66.0	17.5	26.5	119%	12.7	437
Manufacturing:																	
Total	363	13.5	7.0	6.4	26.3	46.9	98.4	46.2	170.2	8.6	14.7	47.4	29.4	62.0	437	16.3	400
Food Products, Beverages and Tobacco	305	13.6	5.0	3.9	26.1	51.3	100.2	51.4	156.4	10.7	18.8	47.1	23.5	49.8	310	21.7	334
Textiles and Textile Products	311	11.2	4.7	2.3	29.2	52.6	147.6	77.7	163.4	4.2	17.4	51.9	26.5	51.1	1173	8.5	346
Leather and Leather Products	363	10.0	3.0	2.6	31.9	52.4	256.7	134.6	190.2	2.0	24.8	55.4	17.8	32.2	3074	6.1	382
Rubber and Rubber Goods	404	10.5	1.8	2.4	31.9	53.3	116.3	62.0	215.6	22.0	25.5	35.4	17.2	48.5	201	43.6	214
Lumber and Wood Products	231	8.9	4.8	7.9	30.2	48.2	86.2	41.5	111.3	5.6	9.9	48.0	36.5	76.0	566	8.6	318
Paper, Pulp and Products	358	12.4	5.7	4.5	33.5	43.8	68.0	29.8	156.9	14.9	13.2	44.6	27.3	61.3	194	25.3	326
Printing and Publishing	230	15.4	11.0	5.9	41.6	26.1	100.1	26.2	60.1	10.4	10.9	44.9	33.8	75.3	253	22.3	293
Chemicals and Allied Substances	419	13.4	7.7	7.9	21.0	50.1	68.6	34.4	209.9	8.1	11.4	52.5	28.0	53.3	351	14.9	541
Stone, Clay and Glass Products	381	14.3	11.4	5.1	28.0	41.2	65.3	26.9	157.1	5.6	14.5	50.9	29.0	56.9	562	8.6	566
Metal and Metal Products	460	15.9	8.6	8.9	22.9	43.7	101.3	44.3	200.7	9.2	14.4	43.3	33.2	76.6	460	17.2	435
All Other Manufacturing	375	9.6	6.8	7.0	32.6	44.0	156.0	68.7	165.0	4.8	14.3	51.0	29.9	58.6	973	11.8	436
Construction	187	17.7	4.0	8.2	47.3	22.7	183.9	41.8	42.4	19.6	7.1	46.6	26.7	57.3	240	35.6	109
Transportation and Other Public Utilities	176	33.0	6.9	7.2	29.9	22.9	10.1	2.3	40.3	27.3	13.3	42.8	16.6	38.7	18	24.4	216
Trade	255	9.1	2.8	6.6	37.7	43.8	311.8	136.5	111.5	4.6	13.6	54.1	27.7	51.2	1324	14.3	216
Service—Professional, Amusements, Hotels, etc.	111	33.0	4.6	10.3	31.9	20.2	32.7	6.6	22.4	24.8	13.1	44.6	17.5	39.3	11	30.2	154
Finance—Banking, Insurance, Real Estate and Holding Companies, Stockbrokers	334	43.8	26.1	15.6	10.4	4.1	166.2	6.9	13.8	18.3	7.6	45.5	28.7	63.1	330	35.3	185
Nominal Concerns—Nature of Business not given	130	13.5	5.1	22.3	35.6	23.4	89.5	21.0	30.5	8.8	15.0	83.5	−7.3[1]	−8.7[1]	111	18.7	222

[1]Deficit.

tory. It appears that the current assets are almost equal to the plant account for the manufacturing companies. No striking differences from the smaller group in the matter of inventory or fixed assets are shown by these figures for all companies. The various relationships presented are deserving of careful study, although only *general* conclusions can be drawn from the statistics of such a miscellaneous group of companies.

TABLE 29

COMPARISON OF BALANCE SHEET RATIOS IN SELECTED GROUPS OF INDUSTRIES, 1918[1]

Type of Industry	Number of Statements	Current Ratio *Per Cent*	Receivables to Merchandise *Per Cent*	Net Worth to Fixed Assets *Per Cent*	Sales to Receivables *Per Cent*	Sales to Merchandise *Per Cent*	Sales to Net Worth *Per Cent*	Debt to Net Worth *Per Cent*
Dry Goods	83	223	85	357	462	391	272	64
Hardware	99	284	60	394	543	328	228	43
Groceries	205	238	72	340	788	564	399	59
Tanners	28	247	50	283	593	294	216	51
Drugs	21	284	41	142	848	349	136	21
Farm Implements	20	356	63	191	330	209	103	38
Lumber	54	259	82	182	445	367	147	32
Packers	19	235	81	184	1,027	830	483	81
Boots and Shoes	66	225	72	259	503	362	279	65
Tire Mfrs. (1924)	...	349	79	115	773	431	153	54
Mixed Type	981	241	65	184	735	473	249	47

In Table 29 are presented in a comparative way the financial relationships found in *selected groups,* mostly of trading concerns, as of the year 1918. Under the "mixed type" were included a number of manufacturing businesses, so that the composite results are not of great significance. However, the analyses here made are suggestive, and if extended over a period of years might prove to be very useful indeed. In their present form these figures can be taken only as a rough "index," and not as a standard. It is probable, however, that the averages of the larger groups approximate the normal conditions in a particular industry, though extremely wide variations were found in individual instances.

[1] Derived from figures prepared by Mr. Alex. Wall, and published in the *Federal Reserve Bulletin,* March, 1919.

TABLE 30

Balance Sheet Ratios of 16 Smaller Rubber Tire Plants

Average of Ratios for the Group of Smaller Tire Companies (*100 per cent=1.*)	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	10-Year Average	Last 6-Year Average	Last 3-Year Average
Fixed Assets to Total Assets	.40	.35	.35	.35	.35	.35	.32	.26	.27	.25	.33	.30	.26
Current Assets to Total Assets	.60	.65	.65	.65	.65	.65	.68	.74	.73	.75	.67	.70	.74
Current Assets to Plant	1.6	1.8	2.2	2.2	2.3	2.0	2.2	2.9	3.3	3.4	2.4	2.7	3.2
Current Assets to Current Liabiiities	5.5	2.1	3.5	3.7	4.5	10.0	3.0	3.0	3.9	3.4	4.3	4.6	3.4
Net Worth to Total Assets	.73	.67	.70	.75	.85	.90	.70	.60	.70	.70	.73	.74	.67
Net Worth to Fixed Assets	1.8	2.0	2.4	2.4	2.5	2.5	2.2	2.5	3.0	3.0	2.4	2.6	2.8
Net Current Assets to Total Assets	.37	.33	.35	.35	.45	.55	.40	.39	.45	.48	.41	.45	.43
Net Current Assets to Plant Investment	.9	1.0	1.5	1.2	1.7	1.6	1.3	1.4	2.0	2.1	1.5	1.6	1.8
Cash to Total Assets	.04	.03	.04	.07	.06	.06	.03	.03	.09	.06	.05	5.5	.09
Cash to Plant Investment	.11	.12	.18	.19	.16	.16	.13	.13	.33	.22	.17	.19	.22
Cash to Current Assets	.13	.06	.07	.12	.09	.10	.05	.05	.13	.08	.09	.08	.08
Cash to Debt	.52	.14	.33	.73	.52	.77	.21	.13	.39	.35	.41	.40	.29
Receivables to Current Assets	.19	.35	.33	.29	.35	.41	.39	.33	.31	.32	.33	.35	.34
Inventory to Current Assets	.68	.59	.59	.58	.55	.48	.54	.59	.55	.58	.57	.55	.57
Receivables to Inventory	.29	.60	.55	.40	.61	.78	.56	.53	.59	.68	.55	.61	.54
Receivables to Sales	.05	.14	.20	.21	.16	.19	.18	.19	.14	.15	.16	.17	.16
Receivables to Debt	1.1	.75	1.0	1.2	1.7	1.9	1.3	.95	1.0	1.1	1.2	1.3	1.0
Sales to Inventory	4.0	4.8	4.3	4.1	4.1	3.5	3.2	2.7	3.6	3.4	3.8	3.4	3.2
Sales to Fixed Assets	8.0	5.6	6.8	5.5	6.1	4.4	5.1	3.6	6.9	5.5	5.7	5.3	5.3
Sales to Net Worth	3.8	2.4	2.3	1.9	2.1	1.5	2.1	1.6	2.4	2.2	2.2	2.0	2.1
Sales to Net Current Assets	7.5	4.8	3.1	2.7	2.9	2.2	2.9	3.0	3.9	3.0	3.6	3.0	3.3
Net Profits to Net Worth	.25	.12	.18	.15	.18	.16	.12	.13	.11	.14	.14	.14	.13
Net Profits to Total Assets	.25	.10	.16	.13	.16	.14	.10	.10	.10	.11	.13	.12	.10
Net Profits to Fixed Assets	.50	.30	.35	.27	.32	.40	.40	.30	.32	.38	.35	.35	.33
Net Profits to Sales	.11	.03	.10	.11	.14	.14	.10	.07	.05	.08	.09	.09	.07

The accompanying table (Table 30) is based on the results of an intensive study of 16 of the smaller rubber tire companies over a ten-year period. During the earlier years, in certain instances the data were lacking; hence the ratios for that period are not altogether representative. A number of the ratios worked out are really of no vital significance. However, much care was exercised in an attempt to eliminate intangible items and to interpret the data accurately. Because of the abnormal conditions prevailing, separate averages have been computed for the six-year period 1914-1919, for the three-year period 1917-1919, and for the entire ten-year period. The fully weighted or "group" average was used to secure the ratios for the separate years, while the periodic averages are straight arithmetical averages based on the number of years taken. The table is presented without further comment.

TABLE 31

FINANCIAL STANDARDS IN THE AUTOMOBILE INDUSTRY

Ratio of	High	Low	Modal Average
1. Current Assets to Current Liabilities...	4.	2.4	3.
2. Cash to Current Assets...............	.24	.04	....
3. Cash to Current Liabilities.............	.85	.1	.25
4. Receivable to Merchandise Inventory...	.55	.15	.27
5. Receivables to Current Liabilities.......	1.0	.20	.50
6. Merchandise to Current Liabilities......	2.75	1.00	2.00
7. Current Assets to Plant Investment.....	3.0	1.5	2.0
8. Net Current Assets to Plant Investment.	2.5	1.0	1.5
9. Net Worth of Plant Investment........	3.5	2.0	2.8
10. Total Debt of Net Worth..............	1.0	.4	....
11. Net Income to Capital Stock...........	.32	.1	....
12. Net Income to Sales....................	.18	.04	....
13. Receivables to Sales....................	.27	.5	....
14. Sales to Merchandise....................	6.	2.5	....

Table 31 indicates in a general way the financial relations commonly met with in the automobile industry until the end of 1920. The study covers all companies in the United States since 1910. So wide a variation existed among the different

companies that it was practically impossible to arrive at an average which could serve as a standard. Some companies specialize in the making of high-grade cars, while others turn out only mass production. Some manufacture most of their parts, while others merely assemble, purchasing the finished parts from other producers. Such divergence of practise naturally affects the financial set-up of the company. However, even when the companies were carefully grouped according to their manufacturing policy, so that dissimilar operating conditions would be eliminated, there appeared to be no definite "standard" for the several groups. The companies were also classified in accordance with the *time* of the annual statement, without much better success.

TABLE 32

AVERAGE FINANCIAL RATIOS DERIVED FROM THE STATEMENTS OF 46 COTTON MANUFACTURING CONCERNS

Ratio	Number of Years	Average Percentage
Current Assets to Current Liabilities	14	511
Receivables to Inventory	13	66
Cash to Current Assets	13	13
Current Assets minus Inventory to Current Liabilities	14	236
Current Assets to Fixed Assets	14	169
Net Current Assets to Fixed Assets	14	96
Net Worth to Capital Stock	14	183
Receivables to Sales	6	15
Inventory to Sales	6	37
Net Worth to Sales	6	71
Sales to Net Current Assets	6	278

A study of the carefully audited financial statements of 46 cotton manufacturing concerns, many of which supplied records for 14 years, reveals rather significant relationships. The average percentage given in Table 32 is based on arithmetic averages of the ratios of the individual companies. These averages may be taken as roughly typical of the relations which will be found in the cotton manufacturing industry. However, averages are always deceptive. There is an extraordinarily wide range between the average *minimum* ratios for the

TABLE 33

Financial Ratios of Typical Concerns Borrowing on the Open Market in 1928[1]

(Based on 1927 Statements)

Type of Industry	Number of Companies	Current Assets to Current Liabilities (No. times)	Profits to Sales %	Profits to Net Worth %	Profits to Working Capital %	Turnover of Working Capital (No. times)	Turnover of Net Worth (No. times)	Turnover of Inventory (No. times)	Collection Period (Days)	Fixed Assets to Net Worth %	Quick Debt to Net Worth %	Total Debt to Net Worth %	Inventory to Working Capital %	Quick Debt to Inventory %
Manufacturers:														
Furniture	25	3.90	6.64	10.84	19.73	2.82	1.63	4.99	94	42.1	22.6	28.2	64.3	68.1
Hardware	63	5.16	5.13	8.38	18.52	4.75	1.53	4.43	56	49.5	19.6	27.0	77.6	55.3
Lumber	17	4.03	4.78	6.21	15.31	4.15	1.09	4.77	45	82.0	16.4	32.5	107.6	61.0
Machinery	25	5.47	6.84	9.35	15.49	2.68	1.66	4.98	93	33.9	26.2	31.7	67.5	55.6
Meat Packers	25	2.89	.90	2.70	7.90	14.40	5.70	10.60	16	61.3	29.9	41.0	100.5	74.0
Shoes	33	3.44	4.02	6.40	9.70	3.76	2.50	4.77	62	36.7	38.0	40.0	76.5	69.0
Stoves and Ranges	21	6.22	2.56	3.12	5.08	2.22	2.02	4.67	121	35.2	23.7	28.5	58.3	65.0
Tanners (upper leather)	19	3.20	5.37	7.06	9.14	2.85	1.96	2.91	50	35.0	31.0	33.0	93.0	45.0
Textiles:														
Converters (cotton goods)	14	2.90	3.65	11.40	10.70	3.58	3.33	4.75	72	1.6	55.4	57.4	85.5	74.8
Cotton cloth mills (North)	23	2.54	2.05	3.20	7.83	3.13	1.20	3.00	57	75.0	33.0	38.0	114.0	77.0
Cotton cloth mills (South)	55	2.89	8.59	10.35	50.70	5.96	1.62	4.29	41	61.3	30.1	34.8	82.0	142.0
Hosiery	22	3.24	3.92	9.91	20.53	4.65	2.08	4.52	49	52.2	26.3	33.1	90.7	71.8
Men's wear	36	3.59	3.76	10.44	12.38	3.68	3.04	5.41	77	13.0	38.7	40.4	65.0	75.9
Work clothing	14	3.70	5.05	10.69	18.15	3.23	2.36	4.16	60	17.9	29.8	30.6	76.8	55.0
Woolen cloth mills	18	4.00	2.83	3.87	7.79	3.30	1.40	4.26	57	56.0	18.0	20.0	81.0	44.0
Trade:														
Auto finance—wholesale and retail	29	1.84	1.12	13.45	6.73	5.94	12.00	....	..	....	285.0	386.0	....	....
Department stores	91	3.45	4.10	9.40	15.83	4.15	2.35	5.13	53	37.7	28.6	39.8	82.3	61.1
Drugs—wholesale	29	3.43	3.03	7.87	9.96	3.54	2.72	4.95	69	17.0	35.3	37.0	74.4	57.9
Dry goods (wholesale)	58	3.14	2.81	6.75	8.21	3.04	2.38	4.49	87	15.3	41.9	45.8	70.2	82.6
Furniture (retail)	22	3.71	6.19	8.27	8.78	1.54	1.68	5.42	273	24.5	37.5	45.2	33.3	142.6
Grocers (wholesale)	191	3.17	1.41	5.65	8.88	5.87	4.07	5.80	42	19.6	41.5	42.8	85.6	67.3
Hardware—heavy (wholesale)	79	4.54	3.25	7.10	10.04	3.15	2.18	3.98	68	20.6	31.5	33.8	84.1	56.5
Hardware—light (wholesale)	40	5.78	2.92	6.12	8.32	2.92	2.20	3.73	66	19.4	31.4	33.9	83.2	50.4
Lumber (retail)	62	3.82	5.09	7.59	12.84	2.36	1.53	3.71	105	22.4	19.8	21.5	50.4	42.0
Wool dealers	17	5.11	2.09	9.00	10.44	5.07	4.53	4.45	24	5.7	28.0	28.0	94.0	44.0
Grand Total	1,028													

[1]This table is based on figures collected by the National Credit Office.

TABLE 34

FINANCIAL AND OPERATING RATIOS OF INDUSTRIAL GROUPS, 1925

Ratio	Manufacturing	Trade	Mining and Quarrying	Transportation and Other Public Utilities	59 Leading Industrial Companies
Number of Companies Included (approximate)	88,674	109,588	19,163	23,613	59
Current Ratio, 1925	2.7 to 1	1.7 to 1	1.3 to 1	1.5 to 1	3.8 to 1
1926	3.4 to 1	2.5 to 1	2 to 1	1.6 to 1	....
Inventory to Fixed Assets, 1925	44%	156%	9.0%	3.2%	40%
1926	46%	137%	8.0%	2.3%	....
Annual Turnover Rates (Based on net sales):—					
Investment (Estimated capital stock, surplus and fixed debt)	1.1 times	2.9 times	0.31 times	0.25 times[1]	1.1 times[2]
Fixed Assets	2.25 "	10.9 "	0.47 "	0.36 "	1.8 "
Inventory:—					
(Cost of sales)	4.0 "	5.8 "	3.6 "	....	....
(Net sales)	5.0 "	7.0 "	5.2 "	....	4.8 "
Receivables	6.0 "	6.9 "	3.5 "	5.1 "	8.2 "
Operating Ratio	78%	83%	69%	....	....
Gross Profit on Sales	22%	17%	31%	....	....
Net Profits, after Taxes, on Sales	6.3%	2.3%	6.9%	....	7.9%[3]
Net Profits, after Taxes, on Total Receipts	5.85%	2.26%	5.38%	12.7%	....
Net Profit on Estimated Capital Stock and Surplus (book values)	7.7%	7.4%	2.35%	5.3%	10.7%
Net Profit on Estimated Investment	7.0%	6.9%	2.13%	3.15%	9.1%

[1]Turnover rates for this group are based on "total receipts."

[2]All turnover rates for this group are based on 38 companies.

[3]38 companies reporting sales.

period studied and the average *maximum* ratios. Nor would it appear that there is a definite modal tendency in many of these relationships. Even for the same company the ratios were frequently vastly different for different years. Evidently the "current ratio" is much higher than has commonly been supposed. However, this ratio, as well as others, fluctuates violently as a result of changes in general business conditions.

In addition to the foregoing, the writer has personally directed analytical studies of the financial statements of care-

fully selected groups of companies in practically all the leading industries. A ten-year period was covered for woolen mills, paper mills, rubber companies, shoe companies, and candy manufacturing concerns. Scores of other industries were covered in a less representative manner for a five-year period.

The results of these extended analyses, while highly instructive, are not such as to warrant the conclusion that definite *mathematical* financial standards can be arrived at by manufacturing companies. The studies do indicate, however, that there are certain rather definite limits within which the financial ratios should be kept, and that these limits are tacitly recognized by the more progressive concerns. Until recently the bankers appear to have given comparatively little attention to the matter aside from their common insistence upon a "two to one" ratio. The very large enterprises frequently follow a more or less similar financial policy, while the smaller ones are often a law unto themselves. The fluctuations from year to year exhibit so many inconsistencies that it is scarcely possible to draw many conclusions. Often the most obvious conclusion is that the financial data obtainable have been simply thrown together to suit the occasion, or have been based on a wholly improper system of accounting. One fact, however, stands out prominently in all these studies, namely, that practically all types of industry were seriously overexpanded both in fixed investment and inventory at the opening of 1920. Few seemed to escape wholly from the general inflation which characterized the last years of the War and the post-war period.

The fact that definite standards do not yet appear to have been adopted in most lines of business, does not by any means warrant the conclusion that the attempt at standardization is not worth making. On the contrary, the most efficient financial standards can be reached only as a result of careful comparative and analytical studies, combined with the constructive interest of bankers and leaders in the several industrial fields. No doubt it would be highly advantageous from all points of view if there could be more standardization in the financial affairs of all types of concerns. With increasing publicity, and

with more scientific research, it is probable that within a few years conditions will be radically changed.

While financial standardization is not as yet readily adopted by manufacturing enterprises, a high degree of uniformity could without much difficulty be measurably attained by many types of trading businesses. The operations of the retail or wholesale distributor are simpler than those of a manufacturing concern, while ordinarily much less time is consumed in performing these operations. Far fewer conflicting elements enter into the situation. Local customs and traditions as well as managerial policies and the nature of the business itself, exert a great deal of influence which frequently prevents the attainment of any theoretical standard in the financial "set-up" or financial performance. However, much has already been accomplished through research organizations of various types in disseminating information which will make possible more standardization in the retail business. Until now most attention has been given to a standardization of expenses rather than balance sheets. Mention will be made in a later chapter of comparative operating costs in all types of business concerns.[1]

Finally, it is interesting to note the striking changes which have taken place in the financial status of industrial corporations as shown by their balance sheets over the past few years. A group of 106 leading companies selected from 18 different industries shows the following changes in current balance sheet items from 1921 to 1927:

Cash and Investment Securities	143	per cent increase
Notes and Accounts Receivable	5	per cent increase
Inventories	15	per cent increase
Total Current Assets	36.7	per cent increase
Accounts Payable	25	per cent increase
Notes Payable	75	per cent *decrease*

Relative to the amount of business being done, the larger industrial concerns are far less dependent on their bankers than in former years. This is clearly shown by the striking increase in cash and investment securities and the no less striking decrease in notes payable.

[1] See Chapter XX.

CHAPTER XV

THE BUSINESS AND THE COMMERCIAL BANK

Importance of adequate working capital for the new business—Various methods of raising working capital—Possibility of financing current requirements without borrowing—Attitude of the small borrower toward the bank—Nature of the unsecured bank loan—Selecting the bank—Selecting the borrower—Questions raised by the banker—Should the banker know the purpose for which the loan is intended—Application of bank borrowings to permanent uses—The purpose of an audit—The bank's credit department—Determining the line of credit—The periodic "clean up" of loans—The 20 per cent deposit requirement—Paying interest on deposit balances—Factors affecting the rate of interest on commercial loans—Borrowing from more than one bank—Influence and requirements of the Federal Reserve Banks—The industrial service of the bank—The future of commercial banking.

IN the preceding chapters have been considered primarily the methods whereby *permanent* capital can be secured for the new enterprise and for the expanding business. Attention has also been given to those aspects of finance and accounting which furnish the background for further discussion. Throughout, those principles which in the light of the best practise appear to be sound have been constantly stressed.

Some mention has been made of the relations existing between the investment banker and the business. However, it is well to remember that many a concern is never in the public market for permanent capital, either at the time of its launching or at any other period. The average business does not have dealings with the investment banker under any circumstances, and frequently finances its expansion from within by means of reinvested earnings. On the other hand, these same businesses may resort frequently or even continuously to the commercial banker in order to borrow money for working capital purposes. There are only a few hundred recognized investment banking houses in the United States, while the number of banks which extend temporary loans to business concerns, large and small, is not far from 27,000. There are also thousands of

other sources, particularly certain types of business houses, through which working capital is supplied to a small extent. It is, therefore, important to examine with some care the ever-present problem of financing current business needs.

Every business should aim to begin with an adequate margin of working capital. The soundness of many a young enterprise is directly dependent upon the amount of its "free" capital, which can be used in financing the purchase, production, carrying, or selling of goods. If all the resources are locked up in non-current assets the concern may be receding before it can fairly commence operations. It is ordinarily impossible for the new business to secure additional funds through advantageous channels to enable it to meet the periodic or constant demands for working capital. Hence, in order to avoid disappointments and unnecessary difficulties, the original *permanent* investment should be sufficient to furnish a reasonable margin for current operations, with the minimum proportion applied to the fixed assets of the business. Under such circumstances it will be possible to take advantage of trading opportunities as they arise and to avoid the losses which result from the failure to take the "cash discounts" on purchases. Provided the business was worth launching, greater independence can thus be secured, and the prospects for future success will be increased because of the favorable condition under which the enterprise is launched.

In considering the various channels through which working capital may be supplied, most of the methods already referred to in connection with raising permanent capital suggest themselves. These methods need not here be discussed in detail. Briefly the following may be mentioned:

1. The reinvestment of earnings;

2. Selling of additional capital stock as the needs for permanent working capital increase;

3. The use of dealer credit, or credit granted by the supply house;

4. The pledging of accounts receivable as security for loans, either from the bank or from discount houses;

TABLE 35

Banking Power of the United States, June 30, 1927

(Value Unit: $1,000,000)

Type of Bank	Number		Resources		Capital, Surplus, etc.		Investments		Loans and Discounts		Deposits (Individual)		Average Resources per Bank ($1,000)
	Actual	Per Cent of Total	Amount	Per Cent of Total	Amount	Per Cent of Total	Amount	Per Cent of Total	Amount	Per Cent of Total	Amount	Per Cent of Total	
National Banks	7,796	28.8%	$26,582	39.0%	$3,239	39.2%	$ 6,393	37.1%	$13,956	37.4%	$18,239	35.7%	$3,409
State (Com.) Banks	15,690	58.0	16,565	24.3	2,084	25.2	3,391	19.6	9,535	25.6	12,937	25.3	1,056
Mutual Savings Banks	618	2.3	9,011	13.2	920	11.1	3,523	20.5	5,065	13.6	8,077	15.8	14,581
Stock Savings Banks	843	3.1	1,816	2.7	134	1.6	420	2.4	1,145	3.1	1,662	3.3	2,154
Trust Companies	1,647	6.1	13,995	20.5	1,874	22.6	3,499	20.2	7,480	20.1	10,094	19.7	8,497
Private Banks	467	1.7	164	0.2	21	0.3	29	0.2	91	0.2	123	0.2	351
Grand Total	27,061	100.0%	$68,133	100.0%	$8,272	100.0%	$17,255	100.0%	$37,270	100.0%	$51,133	100.0%	$2,518
Total other than National	19,265	71.2%	$41,551	61.0%	$5,033	60.9%	$10,862	63.0%	$23,314	62.5%	$32,894	64.4%	$2,157
Federal Reserve System—													
Member Banks (All National banks plus 1,303 State banks and Trust Companies)	9,099	33.5	42,810	62.8	5,147	.62.2	9,818	57.0	23,149	62.1	29,945	58.5	4,705
Member Banks other than National	1,303	4.7	16,228	23.8	1,908	23.0	3,425	19.9	9,193	24.7	11,706	22.8	12,454
All Banks outside Federal Reserve System	17,962	66.5	25,323	37.2	3,125	37.8	7,437	43.0	14,121	37.9	21,188	41.5	1,410
Federal Reserve Banks	12	....	$5,130	....	$360	....	$511	....	$704	....	$2,352	....	$427,500
Building and Loan Associations (1926)	12,626	....	$6,334	....	....	....	....	....	....	....	....	....	$502

5. Borrowing from the commercial bank by discounting the concern's promissory notes (the loan being unsecured by any collateral);

6. Borrowing on the "open market" by selling the concern's promissory notes through "note brokers" or commercial paper houses;

7. Discounting trade acceptances or bankers' acceptances with the bank;

8. Raising commodity loans by the use of warehouse receipts and bills of lading as collateral, sometimes combined with the use of drafts;

9. By selling notes or bonds in cases of emergency—a method very frequently used during the past few years.

In the present chapter attention will be centered on the essential features of *borrowing from the bank,* while in the following chapters open market borrowing, the use of trade and bankers' acceptances, and miscellaneous methods of raising working capital not previously examined, will be discussed.

RAISING WORKING CAPITAL WITHOUT BORROWING

Before taking up the question of borrowing from the banks, passing attention should be given to that conduct of business whereby a concern grows from within in such a manner as to finance its working capital needs without depending upon loans of any sort. This end may be achieved either through the reinvestment of earnings or the raising of additional capital by the owners of the business. While this may be an ultra-conservative policy in certain lines of enterprise, there is little question that a business which grows in this manner will develop soundly. Risks will be reduced to a minimum and the value of credit, capital, and financial integrity will be thoroughly appreciated. In the beginning the growth may be somewhat retarded. Immediate sacrifices of this sort, however, will probably lead to high returns in the future. As a matter of fact if a business would begin with enough capital to finance its first year's operations, and would then be content

to grow conservatively out of earnings, it might rarely if ever need to borrow from any source.

Some of the outstanding examples of business success have financed their working capital needs in this conservative manner, constantly protecting and conserving their "credit," but not attempting to use it. The largest department store in the United States is said rarely to patronize the banks. One of the largest musical instrument concerns has not in a period of 20 years borrowed in the aggregate more than $150,000! The individual owner, however, is making profits at the rate of about $100,000 per year. Many examples might be cited to show the consistent following of this "non-borrowing" policy. Many of the larger and sounder manufacturing establishments are noted for their huge balances of free working capital. In many instances they do not borrow at all for long periods of time. Frequently they accumulate huge cash balances which, when the funds are not needed, are invested in high grade and readily marketable securities or short time loans, which can usually be sold with no appreciable loss, and perhaps with some profit, when money is again needed in the business. The opportunities for profitable investment of this sort are increasing. It is a serious mistake to conclude, as some students and writers have asserted, that it is *essential* for a business to borrow, provided it wishes to become strong and to realize large returns.

It has also been frequently asserted that a business which does not borrow will not become known by the bankers, and hence may suffer for two important reasons. In the first place, the concern will not have an opportunity to profit by the counsel which the banker is in a position to give. Secondly, it is argued that a company which has not made use of its "credit" may, no matter how sound its finances, find itself in an emergency position when the banks will be unwilling to lend assistance because they do not have sufficient knowledge of the concern.

Though it is perhaps true that a certain amount of more or less useful financial "advertising" comes to a business as the result of its banking connections, the two arguments cited are upon the whole fallacious. Any business which is sensibly managed will be on excellent terms with its banker and will

probably have made arrangements for a "line of credit," even though it may rarely if ever find it necessary to borrow. The banker's sole function is not merely to lend money—not by any means! Presumably, the credit of such a business should stand very high, provided profits are being realized, and any reputable banker would take sufficient interest in such a borrower to keep himself posted on its general affairs. It is almost inconceivable that a company conducted in this conservative manner could be anything but sound.

Credit—*the power to command present goods or money in exchange for a future equivalent*—is a very delicate instrument which must be handled with the greatest caution. It is strengthened most by conserving it, not by straining or abusing it. Credit is difficult to establish, easy to lose and almost impossible to regain. It must be most vigilantly guarded. Perhaps the definition of credit attributed to Mr. Forgan is worth quoting in this connection:

> "Credit—a thing which a man who does not need it can get in amounts limited only by the extent to which people know he does not need it, but a thing which the man who needs it so badly that his name is already on the list of the candidates for the poor farm cannot get at all."

There are some concerns whose business is very constant throughout the year and which accordingly have no periodic need for an increased amount of working capital. Such types of business might very properly be expected, under an ultra-conservative management, to supply themselves with the necessary amount of working capital—practically all of which is in their case *permanent*—without resorting to borrowing. If they should borrow from the banks they would really tend to be constant borrowers through the periodic renewal of their loans. The fact remains, however, that most concerns of this type *do* borrow as a matter of general policy, even though it might be perfectly possible for them to finance their needs in another manner. Further, large numbers of enterprises whose business is "seasonal" are at certain intervals forced to provide additional working capital in order to carry them over the "peak." In such cases there is ordinarily good and sufficient reason for applying to the bank for assistance.

Moreover, the fact that competitors are endeavoring to extend their business more rapidly by borrowing instead of by employing other means of raising capital, frequently seems to make it necessary, in practise, for a concern to borrow in order to hold the pace—even when, in theory, the management might prefer to follow a more conservative policy. Profits must be made if the business is to continue. It is human to value the present more highly than the future. Ultimate *higher* profits do not ordinarily interest the average owner as much as *immediately* realizable returns. In many instances, also, the pressure of competition is such that there is apparently no clearly defined alternative between following the procession, with a view to taking *at once* whatever profits can be made, or foregoing profits altogether! From the practical point of view, therefore, the end may justify the means, and ample credit must be used. The borrower, however, would be well advised to keep the fundamental issues clearly in mind, whatever his immediate policy may be.

THE ATTITUDE OF THE SMALL BORROWER TOWARD THE BANK

The average business man who conducts an enterprise of moderate size is frequently very timid about approaching the bank for a loan. It sometimes seems that the more careful and thrifty he has been in managing his business, the less confidence he has in approaching the bank. He sometimes feels that he is asking a favor, instead of going to the bank as a purchaser of the only commodity which the bank has to offer —its "refined" and better known credit in exchange for the company's individual credit. It has not infrequently happened that a business man has injured himself by losing his cash discounts on purchases, due to his reluctance to make application to the bank for a loan. However, the average banker is waiting with open arms to receive a borrower of this sort whose chief drawback is his modesty and unfamiliarity with general banking practises.

On the other hand there is a common type of borrower—perhaps better referred to as a "would-be" borrower, since his

applications are very frequently turned down—who seems to believe that he is conferring a special favor on the bank when he applies for a loan. This type of borrower makes large demands backed up by small achievement. In fact, he apparently thinks that the chief problem of business is that of raising money rather than of rendering service. He is usually short on performance and long on promises; sparing of his own capital and profligate with that of others. Every banker comes in contact with a certain number of this type. It would be pleasant to believe that such borrowers do not find it possible to secure loans which endanger the capital of others. Unfortunately, however, this is not altogether true, inasmuch as the extensive competition in banking in this country leads to the taking of many risks which under a centrally controlled system would scarcely be thought of. Consequently, the extraordinary development of individual banks in this country, as opposed to the branch bank system common in other industrial countries, has perhaps led to rapid industrial growth, but has also fostered many a failure.

There is a third type of small business man who tries to avoid borrowing from banks, not because his financial position is unsound or because he does not feel the need of a loan. On the contrary, he labors under the thoroughly mistaken notion that the banker, for some reason, is not an altogether safe person to deal with, because he requires so much information regarding the methods of conducting his business, which information, he thinks, may by some mischance fall into the hands of competitors. Some are even convinced that the bankers themselves would make use of information gained in order to further their own private interests.

There are, also, certain prospective or occasional borrowers who feel that their account is regarded by the bank as a necessary evil. They think of the banker as a man who looks coldly and impartially at their business needs, his chief desire being to make profits for himself. Or they may feel that the banker either misunderstands or fails to take a sympathetic interest in their business.

Such are the points of view not infrequently encountered among small business men, who, after all, represent the great majority in the United States. Even among business men of considerable prominence, there is frequently evidence of an utter failure to understand the true functions of a commercial bank. Many apparently expect the bank to lend them money almost wholly upon the security of their fixed assets, or to furnish permanent capital. They object to the usual inquiries and investigations made by the banks, resent the customary deposit requirements, are reluctant to pay off their loans periodically, and in general fail to understand the need for close cooperation between the bank and the borrower, if business is to be successfully conducted. Many borrowers in times past have been particularly resentful to any suggestions which the bank might make regarding the conduct of their business.

This feeling has undoubtedly in a measure been fostered by the attitude of the banks themselves, inasmuch as they have frequently failed to acquaint themselves with the nature of their client's business. There have also been instances when the small borrower has not been encouraged because his account would be unprofitable, or more particularly because, being so small, it would be wiser for him to finance himself without borrowing until he should have demonstrated his capacity to make good.

In general, however, most of the criticisms directed against banks along the lines above indicated are wholly groundless. The excessive competition in banking in the United States has led to a particular cultivation of the *small borrower.* In fact, credit has perhaps been far too easy in this country. The results have manifested themselves in growth too rapid to be healthy, characterized by an appalling number of failures and inefficiently conducted enterprises, and the economic losses of woefully misdirected industrial energy. Likewise, this same competition in banking and the eagerness to secure profitable accounts, has made it possible for many a strong concern, or supposedly strong concern, to ignore its bank and refuse to give the information regarding its financial condition which is essential to intelligent credit granting.

It is really absurd to contend that the small business man is not given a reasonable opportunity because of "monopoly" in banking. On the contrary, his opportunities for borrowing when it is not good for him to do so, have been rather too extensive. The average banker is delighted to have an opportunity through the extension of proper loans to assist in the growth of a soundly managed and worth-while enterprise, even though it be small. The greatest concerns of today had humble beginnings, and many of them have gradually grown powerful as a result of the disinterested guidance of a friendly banker. Though there has sometimes been much loose talk about banker control of industry, such criticism cannot properly be launched against the average commercial bank. If a customer is frank with his bank and endeavors to abide by the requirements imposed on him, he can usually get any service within reason—frequently far more than his capital or capacity would warrant, from the economic point of view.

It must not be supposed that the banks are wholly free from criticism along certain lines or that they have lived up to the full extent of their possibilities in extending *constructive* service to the industrial world. Much remains to be done. In fact, it is probably true that in the past the average bank tended to adopt a rather passive attitude toward industry and to regard itself primarily as a dispenser of credit, instead of assuming a positive and constructive attitude. Recent years, however, appear to be bringing a wholesome change in this respect.

Later in the chapter reference will be made to possible improvements in the relations now existing between banks and their borrowers, which changes must be worked out largely by the banks themselves. Let us now note briefly some of the considerations which may influence a business concern in selecting its bank.

UNSECURED BANK LOANS—THE USUAL TYPE

The usual type of loan made by a bank to an operating business concern arises through the discount of the borrower's

promissory note, without any security whatever but the integrity of the management and the financial condition of the borrowing concern. A deposit is "created" when the bank credits to the borrower's account the face of his note less the agreed-upon discount for the time which the note has to run.[1] These loans are ordinarily "time" loans, that is, the note specifies a definite date of maturity at which time the obligation is to be liquidated, presumably out of the proceeds of the ordinary transactions of the business, for financing which the loan supposedly was made. The length of time varies according to the particular needs of the business, the range ordinarily being from a minimum of one month to a maximum of one year. More commonly, however, these loans will probably be for 60 or 90 days or perhaps for four months. Ordinarily, promissory notes given in this manner will carry only the name of the individual, firm, or company which is borrowing, though endorsed or guaranteed notes are not uncommon. When only one name appears on the note it is referred to as "single name paper."

An examination of the accompanying table (Table 36) reveals the fact that at recent periods around 50 per cent of national bank loans were in the form of unsecured commercial loans arising through the discount of promissory notes. No business, provided its credit is sound, will as a rule borrow for working capital purposes in any other way, unless perhaps its business is of such a sort that the use of warehouse receipts and similar documents as collateral is customary in the trade.

SELECTING THE BANK

There are times, places and circumstances when the question of selecting a suitable bank is really of little consequence. There may be no alternative or there may be one outstanding institution in the locality which a man conducting a certain

[1] Occasionally, loans are made on the "interest to follow" plan. Namely, the full face of the note will be credited to the borrower's account, and the interest will be paid at the maturity of the loan.

TABLE 36

CLASSIFICATION OF LOANS AND DISCOUNTS OF ALL NATIONAL BANKS*
(*Unit: $1,000*)

Class of Loan	June 30, 1926		June 30, 1927		June 30, 1928	
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
On demand, paper with one or more individual or firm names (not secured by collateral)	$ 775,107	5.78	$ 821,795	5.89	$ 872,744	5 76
On demand, secured by stocks and bonds	2 053,871	15.31	2,223,557	15.93	2,616,579	17.28
On demand, secured by other personal securities, including merchandise, warehouse receipts, etc.	324,405	2.42	342,914	2.46	384,345	2.54
On time, paper with one or more individual or firm names (not secured by collateral)	6,344,135	47.28	6,125,942	43.90	6,225,711	41.11
On time, secured by stocks and bonds	1,982,754	14.78	2,215,105	15.87	2,497,128	16.49
On time, secured by other personal securities, including merchandise, warehouse receipts, etc.	1,133,621	8.45	1,045,178	7.49	1,092,097	7.21
Secured by improved real estate under authority of sec. 24, Federal reserve act, as amended:						
1. On farm land	123,641	.92	165,903	1.19	187,508	1.24
2. On other real estate	337,393	2.51	571,468	4.09	755,136	4.98
Secured by real-estate mortgages or other liens on realty not in accordance with sec. 24, Federal reserve act, as amended:						
1. For debts previously contracted (sec. 5137, R. S. U. S.)—						
(*a*) Farm lands	116,887	.87	118,032	.85	114,727	.76
(*b*) Other real estate	92,605	.69	105,524	.76	113,863	.75
2. All other real estate loans—						
(*a*) Farm lands	11,555	.09	21,274	.15	22,890	.15
(*b*) Other real estate	43,371	.32	80,324	.57	91,791	.60
Acceptances of other banks discounted	78,329	.58	93,638	.67	155,603	1.03
Acceptances of reporting banks purchased or discounted	(1)	(1)	25,042	.18	14,873	.10
Total	$13,417,674	100.00	$13,955,696	100.00	$15,144,995	100.00

type of business will naturally patronize. Usually, however, even in the very small town, there are found at least two banks between which a choice must be made, while in the cities the number of banks which may be applied to for loans is almost perplexingly large. Commercial banks differ according to the source of their charter, whether state or national, according to size, type of management, specialization in certain lines of industry, and in many other respects. Such questions as the following, among a host of others, may naturally arise in the mind of the prospective borrower.

* From Annual Report of the Comptroller of the Currency, 1928.

1. Shall business be done with a national bank or with a state-chartered bank or trust company? The latter in many states carry on practically all the operations of a commercial bank and in addition sometimes perform other functions not permitted to national banks. State banks are more than twice as numerous as national banks. In many places, therefore, only state institutions can be patronized.

It is well, however, for the borrower to familiarize himself with the essential differences between the banks of his particular state and national banks. The latter, while not centrally regulated, operate under uniform federal laws, are subject to frequent examinations by national bank examiners sent out from the office of the Comptroller of the Currency, and must make reports of their condition to the Comptroller five times each year. The Federal Reserve Board, also, has the right to examine member banks at its discretion. Since no previous warning is given either as to the time of the examination or as to the period which is to be covered by the reports, it is apparent that an unusually careful check is kept on the financial soundness of national banks. Many state banks are also subject to stringent provisions of this sort, though, as a rule, state laws are less strict than the national bank laws, particularly as to examinations, reserve requirements, and the like. However, it is not the purpose of this book to give details regarding the legal differences met with in the various types of banks. In general, state banking laws are tending more and more to be modeled after the National Bank Act.

One very vital difference should be mentioned. National banks are members of the Federal Reserve System and as such have an opportunity to protect themselves in cases of financial stringency by rediscounting certain types of eligible loans with the Federal Reserve banks of their districts.[1] State banks and trust companies, also, under certain conditions may become

[1] The twelve Federal Reserve banks are located in the following cities: District No. 1, Boston; District No. 2, New York; District No. 3, Philadelphia; District No. 4, Cleveland; District No. 5, Richmond; District No. 6, Atlanta; District No. 7, Chicago; District No. 8, Saint Louis; District No. 9, Minneapolis; District No. 10, Kansas City; District No. 11, Dallas; District No. 12, San Francisco.

members of the Federal Reserve System. At June 30, 1927, there were 1,303 state bank and trust company members of the Federal Reserve System with aggregate capital of $1,908,-000,000 and total resources of $16,228,000,000.

It is also interesting to find that the resources of member banks (national and state) of the Federal Reserve System amount to almost 63 per cent of the resources of all banks, both national and state. The average resources of non-national member banks is three or four times as great as the average for national banks. Further, nearly 75 per cent of the entire banking resources of the United States, exclusive of all savings and private banks, was on June 30, 1927, represented by members in the Federal Reserve System. At the end of 1921, according to the eighth report of the Federal Reserve Board, 80 per cent of the total resources of state banks and trust companies having a combined capital and surplus of $1,000,000 or more, was represented by membership in the System. Of the smaller banks eligible for membership, only 21 per cent of the resources were controlled by members of the System, while 88 per cent of all member state banks and trust companies showed a combined capital and surplus of less than $1,000,000.

It is, therefore, of considerable interest and importance to the borrower to know whether his bank is in the Federal Reserve System, and if not, whether it is eligible for membership—though of course mere size of capital does not give assurance that a bank will be admitted by the Federal Reserve Board. Table 37 shows how membership in the Federal Reserve System changes from year to year. Incidentally, in the period 1921-1927, the number of all banks decreased 3,754, while total resources increased $18,500,000,000, the average per bank increasing from $1,600,000 to $2,500,000.

Finally, it may be of interest to note that the records show a very low percentage of failures among national banks. From 1865 to 1927, 1,173 national banks were placed in charge of receivers, and of this number 68 were subsequently restored to solvency, while 467 were in process of liquidation at the end of 1927. The number of failures in recent years has been unusually heavy, caused by too great liberality in granting charters, and by unfavorable conditions in the agricultural districts of

TABLE 37

CHANGES IN THE NUMBER OF MEMBER BANKS IN THE FEDERAL RESERVE SYSTEM, BY CLASS OF MEMBER, JANUARY 1 TO DECEMBER 31, 1927*

Class of Change	Number of Member Banks		
	Total	National	State
Active member banks, January 1, 1927	9,260	7,906	1,354
Additions to membership:			
Organization of national bank	82	82	....
Conversion of nonmember bank to national	32	32	....
Admission of State bank	29	....	29
Resumption following suspension	10	8	2
Conversion within the system	....	8[1]	3[1]
Other additions	1	1[2]	....
Total additions	154	131	34
Losses to membersbip:			
Merger between member banks—			
Intraclass	110	96	14
Interclass	36	19	17
Voluntary liquidation (terminal)	9	8	1
Suspension and insolvency	124	91	33
Absorption of member bank by nonmember bank	55	49	6
Conversion of member bank to nonmember bank	20	12	8
Withdrawal of State bank	26	....	26[3]
Conversion within the system	....	3[1]	8[1]
Total losses	380	278	113
Net change	−226	−147	−79
Active member banks, December 31, 1927	9,034	7,759	1,275

[1]Succession between members of one class and members of the other without effect on the number of banks in the system.

[2]National bank organized to succeed a national bank that had previously suspended.

[3]Includes 2 banks which were dropped from membership in the system at the expiration of their State charters.

the West. In the three fiscal years ending in 1928, there were 290 failures among national banks, while the number of state and private bank failures for the same years was 1,598.

2. It is also important to inquire regarding the reputation of a bank's officers, to find out if possible their various business connections, their past record, and the like. It is well to know whether they have a reputation for disinterested service to their clients, or whether it is commonly said that they are eager to make private gain in connection with their banking business. Incidentally, it has sometimes been said that a wholly disinterested and thoroughly honest banker finds it difficult to become wealthy. He is a guardian of the reputation and resources of others, and must exercise his trust with the most scrupulous care without aiming at mere personal gain.

*From *Fourteenth Annual Report of the Federal Reserve Board*, page 27.

In this connection attention will naturally be paid to the *clientele* of the bank. What type of business men patronize it? What is their line of business, and are they rated as successful?

3. If the borrower's business is of some dimensions and there are a number of competing banks in the field it is rather important to know whether the prospective bank is thoroughly familiar with the borrower's line of business. Some banks are more or less specialized in certain industries, and will under these circumstances be able to give better service and to cooperate more fully with their borrowers. Provided due caution is exercised, such a bank may be both strong and helpful.

4. On the other hand, the bank which is over-specialized may be running too great risks, since its loans may center largely in a particular industry which may be adversely affected by changes in the general business situation. Accordingly, it is important for the large borrower to find out, if possible, something about the diversification of the bank's loans and to know whether it lends to business concerns throughout the state or country, or whether its loans are largely local. The geographic distribution of loans as well as their diversification according to types of industry may be a very important consideration. However, the average bank at the present time distributes its risks by investing part of its resources in "commercial paper" put out on the "open market" by the larger industrial concerns.[1]

5. The extent of a bank's resources may be a very vital consideration. Is it large enough to supply the maximum needs of the customer, or will it be necessary for him to resort to other banks as well? Ordinarily national banks as well as state banks are forbidden by law to lend on promissory note to their customers in excess of 10 per cent of the bank's combined capital and surplus. Therefore, a bank with small capital may be unable legally to accommodate the customer to the extent which he may properly expect from his bank. In this connection the borrower may be interested in the proportion existing between the bank's capital and its surplus. While

[1] See page 449, Chapter XVI.

a relatively large surplus is an element of strength, a surplus which is much larger than the capital stock may possibly indicate that the owners are endeavoring to escape the double liability provisions of the banking law by keeping their capital unduly small.

6. The question not infrequently arises as to whether a company should do business with a bank in the immediate locality or in some adjoining city. An answer to this question is difficult to give, since much will depend upon the comparative resources of the banks, the type of service which they can render, and the particular needs of the business. Some concerns prefer to do most of their business with a larger bank in some other place because of the prestige which they think such a connection gives them. Other things being equal, however, it is doubtless wiser to patronize the "home" bank which is most conveniently located and can be readily resorted to in case of need.

7. Finally, it is also important to know not merely the character of the service which the bank is in a position to render, but also to find out definitely what requirements the bank in turn will impose upon the borrower. As a result of competition in the banking field there is frequently an appreciable difference in the demands made by banks upon their borrowing customers. Many a beginning business man has made the fatal mistake of choosing a bank, frequently a private institution, because of the apparent liberality of its treatment and the absence of embarrassing requirements or searching questions regarding the conduct of the business. No greater mistake could be made. If a choice is open, that bank should be selected which scrutinizes most carefully the affairs of the borrower and which requires him scrupulously to abide by the terms laid down, its policy being tempered, of course, with that "judgment" which every able banker must constantly exercise in behalf of a worthy client.

While there are numerous other considerations to be borne in mind, those indicated are probably most essential.

Once having chosen his bank, the business man will do well to "put his cards on the table." He should not have dealings

with a bank unless he can put sufficient trust in its officers to let them have full information regarding his affairs. Absolute frankness is the first essential to "constructive" credit granting.

SELECTING THE BORROWER

The majority of banks are soundly managed, and all chartered institutions are presumably regulated by strict laws, though there is, of course, a great deal of difference between various banks from the borrower's point of view. However, as stated above, 75 per cent of the commercial banking *resources* of the United States, about half in *number* of *eligible* banks, and one-third of all banks other than mutual savings and private banks, are now subject to the provisions of the National Banking Laws and the Federal Reserve Act. Hence there is a reasonable degree of standardization in Banking practise, so that the borrower will not as a rule be running unwarranted risks even though he is in a position to exercise little judgment in the selection of his bank.

The banker, on the other hand, is confronted by a far different situation. He must choose his risks from more than 450,000 incorporated and more than 1,750,000 unincorporated business concerns, subject to the diverse regulations of 48 different states. If he wishes to extend his operations and lend to foreign customers the banker encounters even greater complications and difficulties. It is, therefore, a matter of the most vital importance for the bank to choose its borrowers with care. The very existence of the bank as a credit-granting institution depends upon the judgment exercised by its officers in selecting risks. Since the average bank does not have an opportunity to pick and choose *preferred* business risks, it is not safe to take anything for granted. An unusual degree of foresight, discrimination, and business acumen is essential to the banker's success. Detailed investigations must continuously be made in order to give the banker a basis on which to form his decisions.

Ordinarily the new borrower will be introduced to the banker through a mutual friend, though such an introduction is by no

means necessary for one whose business reputation is established. The preliminary interview is of much importance as it enables the banker, who is constantly dealing with men, to form a pretty definite and dependable opinion as to the "character" and perhaps even the "capacity" of the borrower who either represents himself or who comes as the properly accredited representative of his business concern. There are doubtless many instances in which the preliminary interview is in itself sufficient to convince the banker that credit should not be extended except on the strongest security, if at all.

Let us assume, however, that first impressions or general report have convinced the banker that the prospective customer is worthy of consideration. A number of questions are in his mind, such as the following:

(*a*) Does the borrower have any capital? If so, how much?

(*b*) Is he making money?

(*c*) Is he saving money?

(*d*) Is he disposed to pay his bills?

(*e*) What has been his past performance and what are his future prospects?

It has frequently been said that the "three C's" of credit are *character, capacity,* and *capital,* of which the most important is character. A fourth "C" sometimes referred to is "collateral," which, however, has no place in the ordinary commercial loan. Some bankers, as well as many business men, have rated character and capacity so high that they have considered it unnecessary to probe deeply into the financial condition of the borrower, and, consequently, have minimized the importance of financial statements and statistical information of various sorts. This attitude, while perhaps under certain circumstances reasonably sound in theory, has often proved disastrous in practise.

The commercial bank in making temporary unsecured loans must look for its repayment to the proceeds of immediate transactions. It is highly important, therefore, to know whether the borrower is conducting his affairs in such a way that it is prob-

able that he will be able to meet his obligations. A private banker or an investment banker, lending only his *own* capital to a borrower for long time uses, might be more warranted in assuming the position that "character" and "capacity" wholly outweigh every other consideration. In the long run his confidence might be thoroughly justified by the results. The commercial bank, however, has no right to take chances which can be avoided, inasmuch as it handles the capital and credit of others whose financial position is endangered if the bank makes mistakes.

The commercial banker, therefore, is entitled to and should demand the fullest information regarding the past and present financial and physical condition of the borrowing concern, and should know something of its future plans. As a starting point, the financial statement is of major importance. It would be absurd to consider the mere statistical record as *all* important. To a large extent, however, this record, if honestly compiled, truly and accurately represents both the *character* and *capacity* of the borrower. It is the silent witness to the intangible qualities which the banker must constantly weigh. Mere figures may easily misrepresent a situation, but granting that they have been used to *inform* and not to *deceive* they will usually reveal in an unmistakable fashion the "capacity" of the borrower.

The financial statement, however, is but a beginning. The essentials in statement analysis have already been outlined in the two preceding chapters. The intelligent banker must have much additional information not presented by means of balance sheet figures and income statements, if he wishes to do justice to all of the bank's customers. Some of the questions raised in this connection were indicated in the sample statement form at the end of Chapter XIII. For the reader's benefit, however, certain leading questions are herewith indicated:

1. It is important that the *statement* be of *recent date,* and that all important changes since the preparation of the figures be made known by the borrower. Conditions shift speedily, and high earnings of six months ago may now be changed to operating deficits.

If the business is of any size, statements prepared by a certified public accountant should ordinarily be insisted upon. Such an audit, however, should be far more than a mere catalog of particulars or a mere certification to the correctness of the figures appearing on the company's books.

2. Special attention should be given to *contingent liabilities* of different sorts. These include particularly liabilities arising through the discounting of customers' notes or trade acceptances, pledging of accounts receivable, liabilities arising through letters of credit when goods have not yet been received, commitments to purchase goods in the future, endorsements for others, and the like. A concern which has discounted some of its receivables, thereby increasing cash, without recording the fact in its statement, will be guilty of a double deception inasmuch as the current assets may be increased by the amount of cash received while the liabilities and the receivables will apparently remain untouched. There are various methods of handling such transactions, but, properly reported, the liabilities would be increased by an equivalent amount, which would immediately lower the current ratio.[1]

[1] As an illustration of the importance of this item, the following brief example may be given:

Current Assets		*Current Liabilities*	
Cash	$100,000	Payables	$200,000
Receivables	200,000		
Inventory	200,000		

These figures show a current ratio of 250 per cent. Let us assume, however, that $100,000 of receivables are discounted. Disregarding the amount of interest deducted, the transaction might conceivably be handled in several different ways as follows:

(a) $100,000 might be added to cash, so that current assets would be increased to $600,000 while payables would remain at $200,000. By this deception the current ratio would appear to be increased to 300 per cent.

(b) In the second place, cash might be increased by $100,000 while a deduction of $100,000 might be made from receivables. Such a handling of the accounts would apparently keep the current ratio at the original figure of 250 per cent, but would indicate a stronger position inasmuch as the current assets would be including a higher proportion of cash.

(c) In the third place, $100 000 might be added to cash and $100,000 to the current liabilities as a result of the new loan created by discounting receivables. This method of handling the account would reduce the current ratio to 200 per cent and would clearly indicate the financial position of the borrower. This is the approved accounting practise.

(d) A more conservative handling of the transaction would be to reduce accounts receivable at the time when $100,000 of receivables were discounted,

3. It is important to know roughly the average "inventory" carried by the borrower. Due to the fact that some concerns follow a practise of taking inventory at a time when stocks are low, the balance sheet may by no means represent the normal condition of the business. It is also essential to know whether a *real* inventory has been taken or whether the figure is merely a guess.

4. It is practically essential to know when the liabilities of the borrower are normally greatest. When do his borrowings and accounts payable reach the "peak"? A mere balance sheet does not give an answer to this question.

5. Many companies borrow from more than one bank or sell their paper on the open market. Under either circumstance the bank should have full information regarding the line of credit extended by other banks and the time when the company borrows from them. If open market borrowing is resorted to, the frequency of such loans and their amount should be noted.

6. If the company has bonded obligations outstanding or notes of various sorts, it is important to know when these obligations are coming due, when interest payments must be met, and what plans have been made for meeting such obligations.

7. In addition to the net sales and cost of sales it is extremely important to know the customary "terms" of sale and of purchase followed by the borrower. If terms not customary in the trade are given in a particular case, this fact should be recorded and explained.

and to increase the cash by $100,000, at the same time increasing the liabilities by a similar amount. If receivables have actually been "sold" to a discount company to be collected by it, the $100,000 in receivables would no longer be an asset of the borrowing company. However, liability for payment might be a very real one in case a customer should default. Hence, our balance sheet, under these circumstances, would show current assets of $500,000 and current liabilities of $300,000, a ratio of only 166 2/3 per cent!

It is not necessary in all cases to report all contingent liabilities as actual transactions on the balance sheet. A definite mention, however, should be made of the extent and nature of such liabilities at a convenient place on the financial statement.

8. It is most desirable to know whether the borrower is a high or low cost producer. How does he rank with others in the trade? What are the probabilities that he can continue to operate at a profit if competition reduces prices or if the demand temporarily decreases? In this connection the probable future trend of production costs and selling prices should be carefully weighed.

9. With reference to particular items of expense, it is of the utmost importance to know what provision the company makes for depreciation, which should be regarded as one of the expenses of operation. Also, the amount of salaries paid to officers or taken out by partners should be carefully scrutinized. Many a business has been prevented from making profits because of its large salaries voted to the officers by themselves as chief owners.

10. Closely related to the foregoing, is the necessity of watching what disposition is made of the net earnings of the business. Are they all paid out in dividends, or is a reasonable proportion put back into the business? If the owners do not have sufficient confidence to reinvest some of their profits in the business, it is sometimes a very serious question whether the bank is justified in advancing even temporary capital.

11. Even though a surplus has actually been built up out of earnings it is important to know where this surplus has been "put." How have the reinvested earnings been expended? Have they really strengthened the position of the borrower through wise investment and expansion, or has there been wasteful utilization, with no apparent return in increased volume of business? Have the earnings been locked up in real estate and buildings, or have they gone to increase working capital?

It is further wise to watch the relations between surplus and common stock outstanding. Although it is extremely important to build up an adequate surplus, it may be a sign of weakness to have this surplus disproportionately large. Not only is control likely to be centered in a few hands, perhaps for personal reasons, but there is always the possibility that

if the cash position is strong extra dividends may at any time be declared out of surplus thus reducing the current ratio. In order to avoid such a contingency it is well for a bank to find out definitely how the borrower plans to "administer" his surplus in the future.

12. The bank should also make inquiries about unfilled orders on the books of the company. Are they *bona fide* or are they doubtful? Have they been entered as accounts receivable, thus causing an inflation of the current ratio? Is it probable that the company can make delivery at the specified dates, or is there danger that it may lose some of its orders or be subject to damages through delay in production or shipment?

13. Have the earnings of the company been affected by favorable leases or contracts which are about to expire? For example, low costs of production might be accounted for by a long time lease of factory, real estate or other buildings at a low pre-war rate. On the expiration of such a lease rentals might become intolerably high, so that the company might be forced to buy or build at great expense or inconvenience, or to pay a rent so high that all of its profits might be wiped out.

14. Has the company been selling largely to one customer or to a small group of customers? If so, what is the present financial condition of these customers and what is the condition in the industry which they represent? What is their attitude toward the borrower? Is it probable that his business with them will continue? Is this business secured by a contract for a definite period of time, or is it merely a matter of good-will? If favorable selling contracts have been responsible for a company's apparent prosperity, this fact should be looked into, and careful attention should be given to the date of expiration of the contract and the possibility of renewing it on favorable terms at its termination. Some businesses have been wrecked because of the fact that, while under contract to sell a large portion of their output to a single powerful customer, they have expanded their facilities to such an extent that the loss of the contract would make it impossible for them to operate at a profit. The company which distributes its goods

through too narrow a channel needs to be carefully watched by the credit grantor.

15. The question of "geographical diversification" of the company's trade is frequently of the utmost significance. In a large country such as the United States different sections may be subject to marked industrial fluctuations without particular reference to the general business situation. Also, a company which sells most of its goods in the foreign trade to a particular country may prove to be a most precarious credit risk. This fact is clearly shown by the unusually large number of recent failures among those concerns which traded heavily with Cuba before the "sugar crisis."

16. It is again important to know whether the business is diversified in its products, or whether it is dependent largely on the marketing of only one type of goods. If products are diversified, it is further important to find out whether the diversification has been a wise and profitable one, or whether different lines of goods have been carried or produced merely to suit the whims of certain customers or to satisfy the ambitions or idiosyncrasies of the officers of the company. Many a concern has been wrecked by wasting money on unprofitable side lines and new ventures, while many another has come to grief because in times of depression it was not possible to turn part of the factory operation into some new channel which might temporarily support the less profitable part of the business. Few considerations are more interesting or more difficult than this.

17. The practice is now common to inquire regarding the insurance policy of the borrower, and usually, though not always, the question appears on the financial statement blank. Adequate fire insurance should always be carried on buildings, equipment and inventory. There is also a growing practise of carrying insurance payable to the company on the lives of important officers of the concern. The wisdom of this policy is evident when consideration is given to the fact that in many instances the success of the business centers largely around the personality, knowledge, or activity of one man or of a very small group of men. So far as known, the record insurance

policy of this sort was that recently taken out by Mr. Zukor, president of the Famous Players-Lasky Corporation, amounting to $5,000,000. If insurance policies of this sort are carried, the bank should not permit a company to report the cash surrender value of the policy as a current asset. A company's current position is low indeed when it resorts to this method of inflating its current ratio.

18. The bank should know in what state the business is incorporated, because of the extremely divergent provisions of the law relating to the issue of capital stock, the method of its payment, the par value of shares, and the like. Also, certain important exemptions are made in some states which might seriously impair the equities of one who makes current loans.

19. Needless to state, the *age* of the business is a significant factor. Past performance and reputation frequently throw much light upon the probable future of a concern. The demonstrated capacity to make money is in itself practically a free ticket to the inmost councils of the banker.

20. It is highly important to know something about the financial interest of officers in the concern which they manage. When the chief officers of a business do not have sufficient confidence in its future to invest their own money, a bank should be extremely cautious about letting them have an opportunity to use its money. The impending failure of many a business has been announced by the "unloading" of securities by its own officers.

21. Again, the personality and past record of the officers should be looked into. Are they fitted for their jobs? Are they active and competent? Can they keep their old business, or do they antagonize customers? Are they "growing" or standing still? Do they occupy their positions as a result of competitive selection after long training in the business, or have they secured their positions largely through favoritism or family connections? No questions can be of greater importance than these.

22. What are the outside relations of the officers? Do they have conflicting business interests? Is their attention divided?

Many a business has been ruined because the officers have given attention to too many different businesses. Competition is so keen at the present time that only in rare instances is a man big enough to risk letting his attention be diverted from the main job.

23. What are the personal habits of the officers? What are their social and family relations? What kind of a life do they lead? The day is past when the chief officers of a business can lead a "high life" without impairing the credit of their company.

24. How old are the principal officers or the chief officer? What is the state of their health? Have they trained competent under-studies who can take their places in emergencies? What plans are they making for the future?

At the present moment there comes to mind one house, the largest of its kind in the world, whose credit is being seriously undermined because the president, who has been responsible for the growth and development of the business, is in a precarious physical condition. The company is tied up so closely with its founder that no one will probably be able to take his place. There are many instances of this sort on record.

25. Of increasing importance is the state of a company's labor relations. How are employees treated? What provisions have been made for their welfare? What is their attitude toward the company and its officers?

26. In these days the public relations of the borrower are of much interest. Is the concern well thought of by the public in general? Is its name favorably known in the locality or throughout the nation, or is the company known for unfair practises and unethical policies? How much real *good-will* does it have?

27. What are the legal relations of the borrower? Are frequent lawsuits encountered? Are damage suits common? Is the company well advised by legal talent? Are any important suits pending? Are the laws relative to corporations being abided by, or is there danger of prosecution under the anti-trust laws?

The credit of many a company has been seriously questioned because of the legal difficulties into which it has been plunged. The number of different kinds of ruinous lawsuits which may be brought against a company could scarcely be listed in this connection. Suffice it to say that the lender should fortify himself with all the knowledge obtainable on such points.

28. The lender should also have a list of the chief customers of the business as well as of the concerns from which purchases are made. The very character of the people with whom a borrower does business may supply valuable collateral evidence either for or against him, and their testimonials are vitally significant.

29. Along with the investigation of these and similar questions it is highly desirable for the credit grantor, in making a substantial loan, to visit the company's plant. No important credit transaction should be put through without this precaution. The trained investigator can without much difficulty find out hundreds of things which will materially assist in deciding upon the loan. Such questions as the following will naturally be raised in connection with a visit to the plant:

(*1*) Is the plant location satisfactory? (*2*) Is it near the market or to transportation facilities? (*3*) Is the plant "layout" satisfactory? (*4*) Is it properly built and commodious? (*5*) Is it in a state of good repair, or is the upkeep careless? (*6*) What is the age of the factory or of the principal buildings? (*7*) Is the equipment up to date? (*8*) Are the workers comfortable? (*9*) Is production carried on with expedition? (*10*) Does there seem to be good-will between employees and their officers? (*11*) Are up-to-date methods of handling material, routing, and the like, followed?

Countless questions of this nature can be answered almost instantly when a competent investigator from the bank is on the ground. Many a mistake can thus be avoided.

30. It is finally important that the bank should find out how the loan is to be met when due. What are the company's sources of incoming funds? Will the current transactions themselves be of such a nature as to liquidate the loan if made?

Can the loan probably be paid off even though the expectations of the company should not be realized in the present transaction? What line of retreat is open to the borrower?

THE PURPOSE OF THE LOAN

31. The immediately preceding consideration suggests that it is absolutely essential for an intelligent banker to know rather definitely the purpose for which the customer is borrowing. There has been a good deal of argument and rather bitter difference of opinion on this point, both among bankers and business men. Some large borrowers have maintained the position that, provided they comply with the bank's requirements and satisfy the bank in other ways, it is not the business of the lender to pry into the use which is made of the loan. Such borrowers have frequently been able to bulldoze their banker into granting them huge loans without any information whatever as to the application of the loan. The writer knows of cases in which the bank has been threatened with the loss of the borrower's account unless loans would be made in this manner. A certain type of successful business man has sometimes assumed that the banker is more or less of a theorist who does not understand enough about the conduct of a particular enterprise to enable him to form any worth-while judgments as to the method of applying the borrowed funds. Therefore, the argument is that it is futile to discuss the matter with the banker.

Bankers have at one time and another acquiesced in this point of view, either because of their feeling that the account might be given to a competing bank or because they themselves have realized that their knowledge of the business was extremely limited. Frequently, also, due to the past reputation or the financial connections of the borrower the banks have been willing, almost without any information as to the purpose of the loan, to extend very liberal credit to particular customers.

It should be perfectly obvious that a business man has no right to ask a banker to lend him money unless he is willing to

take the lender into his confidence. The banker, on the other hand, has a perfect right to be given the opportunity to pass upon the *wisdom* of any proposed transaction even though he may not at all times be disposed to exercise this right. Unless the borrower has as high a regard for the lender's money as the lender himself is supposed to have, it is a pretty safe rule not to grant the loan.

APPLICATION OF BANK BORROWING TO PERMANENT USES

Without going into details regarding the theories of commercial credit, the writer would take direct issues with the point of view that bank loans may properly be used for fixed capital purposes. In the first place, the bank makes its loan primarily upon the strength of a company's current position. The straight commercial loan is unsecured. It cannot be paid out of fixed assets, but only out of the current income of the business. The banks in this country have no lien whatever on the general assets of the borrower. They are merely unsecured creditors along with others.[1] Obviously, therefore, if the money borrowed in this manner is used for fixed capital purposes—and unfortunately many companies have made use of bank borrowings in this way—even though the investment should ultimately prove profitable, it will probably yield no immediate returns. The commercial bank, therefore, whose strength depends upon the liquidity of its loans, is simply putting itself in the position of a long time investor who can never be certain as to the future.

The mere fact that most loans of this sort are in normal times paid when due is by no means a justification for the prac-

[1] It is interesting to note that the Canadian banking practise is different in this regard, inasmuch as the bank in making a loan really takes a chattel mortgage upon the entire property. Such a practise, however, which might greatly interfere with the permanent financing of a company, would scarcely be tolerated in this country. It may further be of interest to note that in England, and to a large extent in Canada borrowing by means of mortgage bonds is not so frequent as in this country. Even the railroads of England have financed themselves by means of debenture bonds (referred to as "debentures"), instead of by mortgages. Apparently short time loans are more zealously protected than "investment" loans.

tise. It would be as reasonable to argue that because a small child can occasionally toddle across a crowded thoroughfare without being crushed, therefore it is perfectly permissible for a mother to let him cross the streets alone whenever he chooses! No line of reasoning could be more fallacious. Certainly the bitter experiences of the past two years resulting in unprecedented failures and financial embarrassments involving billions of dollars, should be sufficient to demonstrate the folly of the antiquated policy in accordance with which banks have made loans, presumably for current purposes though actually for investment uses.

Most of the post-war financial ills have arisen through over-expansion of the business at the expense of the working capital position. This situation was made possible because of the unwarranted optimism and even stubborn confidence of business men, combined with the lack of foresight and supineness of many bankers who might have exercised a strong controlling hand for the good of all concerned. Many companies which were financing themselves in this way have recently had three alternatives to follow. The first is bankruptcy; the second is a bank receivership; while the third alternative has usually been the issue of long time first mortgage bonds in order to supply adequate working capital!

Many banks have been forced constantly to renew their commercial loans for two or three years. Many will continue to renew these commercial loans for a long time to come unless they wish to throw their borrowers into liquidation and then run the risk of realizing only a few cents on the dollar because of their weak position as unsecured creditors! The chief function of many bankers in the period 1920-22, as a result of the adherence to unsound lending policies in the past, was to act as wet nurses to borrowers whose optimism outweighed their common sense. Many banks are now perforce becoming managers of industrial concerns. Surely, the millions, yes, billions of dollars lost as a result of the extension of unwarranted bank credit, much of which was used for investment purposes or for questionable current financing, ought to furnish an object lesson, now that the catastrophe is largely past,

which will prevent such unwise extension of credit in the future.

There is also another aspect of the situation which should be mentioned. The bank, after all, is the guardian of the capital and credit of the industrial world. It is in a very real sense a public servant. It owes to its depositors the assurance that their interests will properly be cared for and that unnecessary risks will not be run. It is, further, under obligation to give those depositors the advantage of the broader knowledge which it is in a position to gain as a result of the extensive contacts constantly made in the business world. From this point of view, also, the bank is under obligation to know the purpose for which loans are being made and to exercise reasonable discretion as to the application of the credit which is granted. The principle in accordance with which the commercial bank is supposed to operate is sufficiently clear. It is manifestly unfair to endanger the credit of those borrowers who make the *proper* use of their temporary borrowings, merely for the sake of others who look to the bank as a supplier of investment funds. If the commercial bank wishes to finance capital requirements, its logical course is to put a certain amount of its own resources into stocks and bonds and not to deceive itself or its customers by winking at the unwarranted use of unsecured bank loans for permanent purposes.

Finally, one more suggestion should be made regarding the "purpose" of the loan. Many examples have recently come to light of loans made wholly without justification to certain companies connected through interlocking directorates with the lending bank. More numerous, perhaps, are those instances in which the bank, without raising any questions, has until too late continued to lend to a company because of the general standing, past performance or family connections of the borrowers. The personal element is and should be of highly significant consideration in extending bank loans. At no time, however, should the bank either through favoritism or through pressure close its eyes to the cold facts of the situation, or refrain from informing itself regarding the use to which the loan is to be put.

THE PURPOSE OF AN AUDIT

To continue our examination of the various steps which may properly be taken by the bank in investigating a prospective borrower, passing mention should be made of the various sources of information available other than the mere financial statement of the borrower and the questions which he may personally answer. In addition to the brief financial data to which reference has from time to time been made, it is highly desirable and frequently essential for the bank to be supplied with a *complete audit* of the borrower's business conducted and certified by a reputable public accountant. Such an audit, as previously mentioned, must be more than merely statistical or mathematical in its nature. A "constructive" audit will supply information and make analyses and suggestions which can be invaluable both to the borrower and the bank. As an example of the possible scope and service of an audit of this sort there is here quoted a statement recently made by an able and forward looking credit manager of a large eastern bank:

> "While some losses are the result of falsified figures, which a proper audit would discover, most of a bank's losses come, not from false statements or lack of financial audits, but from the improper manufacturing and merchandising methods of those to whom they are loaning money. Many concerns of course need a financial audit, but in my opinion what they most need is an *industrial* audit; if a concern's management is able and honest and the business appears well handled and profitable, if its own accounting methods give evidence of competency and clearness as shown by the information available, it gives me little added confidence to have its statement signed by an accountant. Under such conditions, granting of credit is not a mechanical process. A large percentage of the credit risk is to be found in the personnel of the management, its character, ability and application. Of course, many concerns do not have a system of their own which enables them to show the important details to their banks in a clear and intelligible manner. An audit of any kind helps these people and helps their banks. But the audit which is of *real* value is not an audit to enable a company to *borrow* more money, but one which will enable a company to *make* more money—an audit which will promote better management, full knowledge of costs, proper routing, proper industrial processes, efficiency, and point out the economic factors af-

fecting the expansion and contraction of the whole industry. The whole idea of the audit, as it is usually referred to, is wrong. If the manufacturing and selling are properly handled, the financing will be a simple matter."

THE BANK'S CREDIT DEPARTMENT

Every well-organized bank at the present time has a credit department, usually under the direct supervision of a vice-president in charge of credit. The active head is a "credit manager" who may perhaps have a large force to assist him, depending of course upon the size of the bank. In small institutions there has not yet been developed the separate credit department, and not until comparatively recent years was much attention paid to this phase of a bank's business. Much yet remains to be done before the credit work of most banks will be on a satisfactory footing, a full analysis of available financial data having been made.

However, the credit department should keep in its own files full records of all past, present and prospective borrowers. It should have comparative financial statements over a period of years and if possible the significant data from the income and profit and loss statements. There will also be filed clippings from financial papers, newspapers, and the like, which have a direct bearing on the affairs of present or possible future customers. The bank will no doubt be a subscriber to some of the leading mercantile credit agencies and financial reporting agencies. The larger mercantile credit agencies, Dun's and Bradstreet's, are useful only in a very general way. Covering the entire country as they do, it is usually impossible for them to keep their reports sufficiently accurate and timely to be of any great service to banks. The bank will therefore on occasions derive much more benefit from those agencies which specialize more intensively on certain lines of industry or which confine their operations only to the larger borrowers.

Generally the bank must rely pretty largely upon its own efforts in order to secure wholly adequate information regarding the borrower. In addition to the audits, interviews, and agency reports which have been mentioned, there are two high-

ly significant sources of information, (*a*) those in the trade with whom the company has dealings either as a purchaser or seller of goods, and (*b*) other banks which have known the borrower directly or indirectly. Both by interview and letter, the trade references given by the customer who wishes to open a new account are questioned regarding essential phases of the borrower's business practises. Much illuminating information is thus secured for present and future use. Opinions thus secured are referred to as "trade checkings."

From banks, on the other hand, much more detailed information is sometimes secured because of their strategic position Those banks which have at one time or another bought the commercial paper of the customer may have collected a good deal of useful information regarding him which they are willing to pass on. Banks with which the prospective customer has actually had an account will, of course, be in a position to supply still further information if they choose to do so. Bank "checkings," should generally be interpreted, not as final in themselves, but only indicative. As a rule, however, the information supplied by one bank credit department to another will be thoroughly accurate as far as it goes, though at times it may not be sufficiently complete. The interchange of credit information is now being developed to such an extent that fuller cooperation in these matters is rapidly being secured.

It is, of course, highly important that the banker in investigating a possible customer as well as in checking up an old borrower shall exercise much discretion and tact in order to avoid offending or injuring the client. A good deal of the objection which has sometimes been raised by business men against the inquisitive methods of the banker has arisen because of a failure on the part of the bank's investigator to appreciate the point of view of the borrower. Provided a real and intelligent interest is taken in the borrower's affairs, the bank will usually have little difficulty in finding out all that it needs to know. Confidences must be absolutely respected, and full cooperation must be extended to those from whom information is desired.

Without further discussion of this question it may be of interest here to list the rules which have been adopted by the

Robert Morris Associates, composed of bank credit men, with reference to handling inquiries which come to them. These inquiries from other banks and from trade creditors are numerous and ever increasing in volume, and need to be handled cautiously in order to avoid any injustice to the individual or the spreading of unnecessary rumors which may tend to injure a borrower's credit.

RULES ADOPTED BY THE ROBERT MORRIS ASSOCIATES IN HANDLING CREDIT INVESTIGATIONS[1]

"1. The first and cardinal principle of credit investigation is the sacredness of the replies, and any violation of this principle places the violator beyond the pale of consideration of the honest credit man.

"2. Every letter of inquiry should indicate in some definite and conspicuous manner the object of that inquiry.

"3. When more than one inquiry on the same subject is simultaneously sent to the banks in the same city, the fact should be plainly set forth in the inquiries.

"4. Individual consideration by the recipient of a credit inquiry of distinguishing marks therein will increase the efficiency of credit investigation.

"5. Indiscriminate revision of files regardless of the presence of the note in the market is unnecessary, wasteful and undesirable.

"6. The continued observance of high ethical principles in the conduct of the credit departments of banks and banking institutions insures the best results and cooperation in safeguarding banking credits.

"7 It is not permissible nor the part of good faith in soliciting accounts from a competitor to seek information from the competitor without frankly stating the object of the inquiry.

"8. In answering, the source of the information should not be disclosed without permission and letters written

[1] Quoted from Shaw, A. W., Company, *Credits and Collections* (*Shaw Banking Series*) pp. 179-180.

in answer to inquiries should be held inviolable by the recipients.

"9. In seeking information, the name of the inquirer in whose behalf the reference is made should not be disclosed without permission.

"10. In answering inquiries it is advisable to disclose all material facts bearing on the credit of the borrower to the end that the paper offered in the open market be of the same description as that held by the borrower's own bank."

It might be supposed that a bank which has carried on investigations more or less along the lines indicated would scarcely care to "turn down" the account. This, however, is not the case. Within a very short time a competent investigator can cover all the points which have been raised, and the bank will then be in a position to act. This action may or may not be favorable. The bank may refuse the account for any one of almost innumerable reasons. Among the more common may be mentioned such as the following:

1. The bank may decide that the applicant does not really need the loan, and that it will be better for him to finance himself without borrowing. Under such circumstances the borrower will probably receive some good advice from the bank.

2. The decision may be that the business is of such a type that if it borrowed there would be little likelihood of cleaning up the loan occasionally, even though the company might be *able* to pay it off at the date when due. This would apply to a steady, "all year round" business, such as is found in certain types of retail trade. Under such circumstances the bank might advise the borrower to supply himself with the necessary "permanent" working capital by securing a larger investment from the owners.

3. The bank may decide after investigation that the business itself is of too uncertain a type for the bank to be interested in. The possible risk may be so great that a particular bank does not feel justified in taking a chance, though some

other banks more familiar with the line of business might be willing to "take on" the account. In other instances, the only method for the company to follow would be to raise working capital by selling more stock or reinvesting earnings.

4. It may be that the bank does not approve of the management or the managerial policy of the company and hence does not care to be connected with the business.

5. Again, the purpose of the loan may not meet with the bank's approval.

6. In the course of the investigation the bank may have found a lack of frankness and willingness on the part of the applicant to supply necessary information. This might cause the bank to refuse the account even though no actual deception had been practised. At times, however, it is found that the would-be borrower has actually misrepresented his condition in such a manner that he is no longer a desirable "moral" risk.

THE LINE OF CREDIT

When it has been decided to accept the account, it becomes an interesting question to determine how extensive the line of credit shall be. This means, "How large a loan, at the maximum, will the bank be willing to make to the customer?" The "line of credit" is simply the bank's acknowledgment of the fact that a customer is entitled to a certain amount of credit under stipulated conditions. Many borrowers wish the bank to extend more credit than they need. The bank, therefore, may not find it desirable to lend as much as the customer wants. However, satisfactory adjustments will be made depending upon the individual case.

It would be quite impossible to lay down mathematical rules for determining the amount of the line of credit.

1. Of course the banker first of all wishes to know that after the loan has been made the borrower's statement will show a safe ratio of current assets to current liabilities, whether that be two to one, three to one, or some other ratio which is gen-

erally considered adequate in a particular type of business. However, the nature of the management, the general business conditions, and other considerations already enumerated in the preceding chapter will influence the situation.

2. In addition to the current ratio, some bankers have in mind rough rules regarding the relation which should exist between net worth and working capital or between working capital and total sales. Some suggest that the net worth should be at least twice as great as the working capital, and that the net sales may be expected to be three or four times as great as the working capital. Another suggestion is that the net worth should always be much higher than the bank loan—from two to four times as large. Others would limit the bank loan to 25 per cent or 30 per cent of the net quick assets. However, for reasons which have earlier been explained, there is really no point in imposing such statistical tests except within a very wide range. Usually a loan should not exceed the working capital.

3. Generally speaking, the maximum borrowing of a concern should depend upon its annual turnover of stock. If, for example, the ratio of the cost of sales to the average inventory is four to one, presumably the borrowing should not exceed at the maximum one-fourth of the cost of sales. This is a reasonable requirement inasmuch as the commercial borrower's loan should be self-liquidating, and normally used in order to "carry" him until the goods which he purchases can be sold.

4. The amount of credit granted will also depend upon the terms of sale and purchase in the trade. These factors will influence the *duration* of the loan even more than its amount. In some lines of business credit should not be extended to the borrower on a particular loan for a longer period than that covered by his usual terms of sale. If no credit is extended by the borrower to his customers he will need a smaller line of credit and should expect to use his "line" for a briefer period.

5. Again, the type of business is significant. A well-managed bank will wish to limit the size of its loan to a more speculative kind of business, even though all factors are present which might seem to justify a larger loan.

6. Another important consideration closely related to the foregoing is the nature of the commodity handled. Too little attention has perhaps been given the significance of this factor. Price movements in the raw material or finished goods chiefly handled by the borrower, are of great significance in indicating the safe limit of the line of credit. Both for the protection of the bank and for the protection of the industry it is desirable at certain times or for certain businesses to be rather sparing in the amount of credit granted.

7. It is important to know whether the borrower clearly sees his way through the proposed transaction so that he will be able to pay off the loan at maturity. It is even more essential for the bank to remember that it cannot afford to lend as much as the borrower can afford to lose. In other words, the bank has no business to take a risk which is financially as great as the company might be able to take.

8. Present and possible future earnings of the business must also be carefully weighed. It is most unsafe to extend a generous line of credit merely on the strength of past performance.

9. With the foregoing considerations in mind, and numerous others already mentioned in different connections, it is probable that the bank will endeavor to give the borrower as large a line as he needs for the business in hand. It may be, however, that because of the bank's capital and surplus limitation or because of general business conditions or the purpose of the loan requested, one bank will wish to take only a *portion* of the account and may advise the borrower to supply part of his needs elsewhere.

The mere fact that a line of credit has been "opened" with a bank does not necessarily mean that the borrower is immediately or even ultimately planning to use that line to the full extent. Presumably a promissory note might at once be given to the full extent of the line. The probabilities are, however, that the company might from time to time sign notes for fractional portions of the loan until the maximum borrowing point is reached. All depends upon the nature of the com-

pany's business, its terms of purchase and sale, and similar considerations.

Some well-managed companies customarily arrange for lines of credit far in excess of their present or probable future needs, just as a matter of insurance. They may even establish lines at different banks from which they rarely if ever borrow. Provided they can convince the bankers of their financial soundness and stability there is no serious objection to this practise. On the contrary, it may in some cases prove a distinct asset to the borrower, since his credit reputation may be thereby raised.

The "line of credit," once granted, will presumably be open at all times to the borrower, *provided he complies with the regulations imposed by the bank.* This does not mean, however, that the customer is expected to be a *constant* borrower. On the contrary he will make use of that line by borrowing for short intervals of one, two, three, or four months and occasionally six months, the duration of the loan depending, of course, upon his particular needs. The "line" therefore may be thought of as relatively "permanent," while the "loan" is temporary.

Lest the reader be misled, it should be explained that a "line of credit" once established but *unused* is not necessarily "open" to the borrower for an indefinite length of time unless he complies with certain definite restrictions imposed upon him by the bank. If he wishes to keep the line "open" he must leave on deposit with the bank a certain percentage of his line, a requirement to which attention will presently be given, and he must keep the banker informed as to his financial condition. Even then, general business conditions or conditions in the borrowing concern itself, may change so radically at times that the bank might find it necessary to revise its former opinion as to the proper amount of the line of credit. It would not be necessary, however, for the banker to start *de novo* in investigating the customer's condition should he later wish to borrow. If the proper contact has been kept, the bank can readily determine whether the loan is justified, and will in all cases make every reasonable attempt to meet the borrower's needs.

THE PERIODIC "CLEAN-UP" OF LOANS

In this connection it is important to note that the bank ordinarily expects its customers to "clean-up" their loans periodically, that is, they are expected at *more or less definite* intervals to pay off their notes and stop borrowing. Those concerns which have a steady, all-year-round business not subject to seasonal fluctuation, find it difficult to pay off their loans in one bank without borrowing from another. They therefore frequently wish to renew their loans at maturity and to become *permanent* borrowers from the bank. Such a policy, however, is to be frowned upon, and this permanent working capital, as has been previously stated, should be supplied by the owners. A seasonal business, on the other hand, periodically needs additional working capital, though the need is only temporary. Such a type of business can reasonably be expected to pay off all of its loans at the time of the seasonal "clean-up," that is, when it receives payment from its customers in accordance with the customs of the trade. The concern should then be out of the money market altogether until the next season's business begins.

As most concerns are steady buyers from month to month and as their bank loans presumably are made in order to enable them to take the cash discounts on their purchases, it is perfectly reasonable that the periodic "clean-up" shall be insisted upon, though a definite rule as to the time of this clean-up cannot be laid down for all types of business. For those businesses whose turnover is slow the repayment may be only annual or nominal. For those with a more rapid turnover of inventory the "clean-up" should be proportionately frequent. either quarterly or semi-annual.

Of course, there are probably exceptional cases when a new and rapidly growing business might find it extremely difficult to pay off all of its loans annually. This is due to the fact that as the business expands, working capital is needed more urgently than it can be supplied by the business itself through reinvested earnings. In such cases, however, the borrower should be carefully watched, for it may be that he is attempting to do

an unsafe amount of business on a too small margin of the owners' capital. The bank may be unwittingly becoming a permanent partner in a concern whose rapid expansion is decreasing the equity of the owners themselves. This is a very dangerous situation. In periods of rapidly rising prices it is also difficult for the borrower to pay off his bank obligations, since he constantly needs more working capital to carry on the same volume of business as before, because of the increased prices. Here again the borrower should be watched, as he is in great danger of recklessly over-expanding.

The safest rule to follow, therefore, is for the banker to *insist* upon at least an annual "clean-up" of loans, irrespective of the nature or age of the business. Such a conservative policy will in the long run reduce failures and prevent many serious involvements. Recent experiences furnish sufficient evidence to bear out the wisdom of this policy. The bank should also assure itself that the "clean-up" is a real one, and that the customer does not merely transfer his loan from one bank to another, or does not shift from the bank to the open market, and call the process "cleaning up" his loans. If the banks fail to enforce this requirement either with respect to their own loans or with respect to those made by their customer elsewhere, they thereby become permanent partners in the business and their resources are to that extent made non-liquid. The borrower on his part, finding credit so easy, may fail properly to conserve and apply his capital.

THE 20 PER CENT DEPOSIT REQUIREMENT

Few requirements of the bank have been more misunderstood by the average business man than the deposit percentage which the banker requires the borrower to maintain as a basis for credit extension. It is common practise to require that the borrower in establishing his line of credit shall make a cash deposit with the bank as evidence of his good faith. When the line is being actively used it is expected that the borrower shall maintain on deposit with the bank a definite percentage of the amount which he is borrowing. The commonest requirement

is probably 20 per cent. This means, for example, that a borrower who has given his note for $100,000 would be credited with a deposit of $100,000 less the discount at the current rate of interest for such loans, but he would be allowed to use only $80,000. Thus it would appear that he is paying interest on $100,000 while really having the right to use only four-fifths of this amount. This would appear to be a 25 per cent increase in the interest rate which he is paying.

It should here be explained, however, that requirements in this regard are by no means uniform. Recent tendencies favor a larger percentage. The range is from 10 per cent for certain sections of the country and for certain industries, to even as high as 25 per cent in rather rare instances. The proportion of deposit required, also, varies somewhat according to the type of business and the standing of the borrower. Where the risks are greater and the borrower's credit less assured, the percentage will probably approach the maximum.

It should further be noted that practise differs widely as to whether the required deposit should be a fixed percentage of the full "line of credit" or only a percentage of that portion of the line which is actually being used at different times. Some banks consistently require that the full percentage of the line shall be maintained year in and year out, even though the line is rarely used. Others impose practically no requirement upon the borrower when his line is not being used. A third policy is to require the borrower always to maintain a certain minimum deposit of the line, 10 per cent for example, even though it is not being used, and then to require the usual 20 per cent balance when loans are actually being made. Still a fourth plan is to keep on deposit a rough *average* percentage of the actual borrowings. It will thus appear that many different possibilities exist with regard to this matter, all of which are more or less followed in practise depending, as stated before, upon local custom, geographical location, size of bank, importance of business, character of its management, type of the industry, and so forth.

Whatever the practise may be in this regard, the banker should explain his requirements carefully to the particular bor-

rower, who in turn should abide strictly by these requirements. The bank's policy should be reasonably flexible, and, within limits, the case of each borrower should be handled on its individual merits.

The question may now be raised as to how this 20 per cent deposit requirement originated. Very few people among bankers or students of the question seem to have any definite ideas on this matter. Some bankers rather naïvely assert that since the average commercial bank must have in reserve about 20 per cent of its deposit liabilities, therefore it is necessary to require the borrowing customer to supply this reserve. This argument is specious, but on analysis appears rather absurd. By analogy the borrowing customer might be expected to supply the *bank's capital!* The owners of the bank, through paid in capital and surplus earnings kept in the business, have presumably supplied a major proportion of the amount needed to satisfy reserve requirements. If this is not sufficient, the large proportion of temporarily unused cash deposits will no doubt make up the difference.

It is probable that the requirement developed along with the development of open market borrowing. When customers began to resort periodically to the open market for their loans in order to profit by a temporarily lower interest rate, the banks no doubt found it useful to require that a certain balance be maintained with them in order to assure the return of the customer as well as to *insure* his line of credit. Further, as competition in banking became keener, it was also a measure of self-protection for the banker to impose this requirement, so that the customer would not be frequently trying to "swap" banks in order to secure a slightly lower interest rate. Probably, therefore, the deposit requirement had its origin largely in the credit competition resulting from the development of open market borrowing and increasing banking facilities. No doubt the balance was fixed normally at 20 per cent rather than at some other figure, because that represented roughly the amount of reserve needed by the bank to protect its deposits.

As to the justification of the imposition of this requirement, the following suggestions may be made:

1. By maintaining this balance the borrower insures his credit. He can ordinarily be certain that when he needs to use his line he will be permitted to do so, provided he abides by the requirements.

2. It is extremely useful for the borrower to have such a cash reserve as a "buffer." He can thus be sure of maintaining a more liquid and sounder financial position. He will be prevented from unduly reducing his cash reserves.

3. This requirement will in itself probably induce the borrower to keep more closely in touch with his bank at all times.

4. The borrower who abides strictly by the requirements and treats his bank liberally in this regard, will be in the position of a *preferred* customer, who can be assured of the most favorable rates which the bank can give. While many a small business man has been disposed to regard the deposit requirement as an injustice and a hardship, the larger business houses keep generous balances, even though they may be "out of the banks" for long periods at a time. When they need money, however, they have no difficulty in making use of their "line," and the rates which they pay are frequently much lower than those charged to a customer who has not protected his credit in this way.

PAYING INTEREST ON DEPOSIT BALANCES

In this connection one other point should be noted. Many borrowers even though reconciled to the deposit requirement, feel that the bank should at least pay interest on their balances when the line is not actually being used. This contention would seem to be a fair one, though it is really not of much significance. As a matter of fact, in recent years competition for accounts has caused most banks to pay interest on these deposit balances. No fixed scale of interest payment has been worked out, and not all customers are treated in the same manner. It depends pretty largely on the desirability of the account itself, or on the influence which the customer can bring

to bear on the bank. Rates paid when deposits are not being used have sometimes run as high as 4 per cent, or perhaps more, though ordinarily not over 2 per cent would be paid. Bankers naturally do not favor the practise of paying interest, and some of the better banks have absolutely refused to do so. It may be that as a result of this small amount of interest paid, the borrower secures a slight advantage. The probabilities are, however, that if he receives interest when his line is not in use, he will simply be required to pay a slightly higher rate of interest to the bank when he is actually borrowing.

FACTORS AFFECTING THE RATE OF INTEREST ON COMMERCIAL LOANS

It should not be supposed that all borrowers secure accommodations from a bank at the same rate, though there is a growing tendency towards standardization, provided conditions are similar, as a result of the policies of the Federal Reserve Board. The bank's own resources, the general money market, and business conditions, are the factors which most affect what may be termed the "basic" rate for *commercial* loans. More specifically, when the bank's surplus reserves are low or when the ratio of "loans and discounts" (resources) to "deposits" (liabilities) increases, a higher rate will normally be charged to the borrower. The latter, therefore, will do well to watch the state of bank reserves. The amount of money in circulation as well as the general level of prices will also have a pronounced effect. In pre-war days the rate charged for loans on the London money market was also of significance.

It is scarcely relevant, however, to examine in detail the question of interest rates. A number of considerations may somewhat influence the rates charged in specific cases so far as the average borrower is concerned.

1. The period in the *business cycle* is all important. There are times in the cycle when money is so plentiful that loans are actually urged upon the borrower and there are other times

when it is almost impossible to secure accommodation at any rate. Rates are usually highest at the peak of prosperity, when conditions are feverish and prices have risen rapidly. As an example of the cyclical changes in interest rates, the following tabulation (Table 38) should be of considerable interest.

TABLE 38

RANGE OF SHORT TIME INTEREST RATES, 1913-1928

Date	Rate on Prime Commercial Paper (60-90 day till 1923)	Prime Customers' Loans 3 to 4 Months (New York)	Call Money Renewal
1913 (average)	5.59%	....	3.26%
1914 "	4.79	....	3.72
1915 "	3.45	....	1.98
1916 "	3.43	....	2.57
1917 "	4.74	....	3.33
1918 "	5.86	....	5.24
1919 "	5.42	....	6.27
1920 "	7.37	....	7.78
1921 "	6.53	....	5.99
1922 "	4.42	....	4.30
1923 "	4.95	....	4.84
1924 "	3.90	....	3.09
1925 "	4.01	....	4.16
1926 "	4.23	....	4.50
1927 "	4.02	4.43%	4.05
1928 "	4.84	4.92	6.05
1927—January	4.17%	4.50%	4.31%
February	3.91	4.50	4.00
March	4.00	4.50	4.20
April	4.09	4.50	4.19
May	4.13	4.50	4.31
June	4.13	4.47	4.35
July	4.06	4.47	4.00
August	3.91	4.38	3.70
September	3.91	4.31	3.88
October	4.00	4.31	3.94
November	3.94	4.28	3.65
December	3.95	4.38	4.47
1928—January	3.88%	4.28%	4.22%
February	4.00	4.25	4.45
March	4.15	4.38	4.50
April	4.40	4.47	5.12
May	4.55	4.53	5.65
June	4.70	4.84	6.19
July	5.13	5.09	6.05
August	5.44	5.34	6.87
September	5.48	5.47	7.26
October	5.49	5.47	6.96
November	5.43	5.47	6.68
December	5.47	5.50	8.60

2. The *time of year* in which the loan is made will have an important effect on the rate. Money is plentiful at certain seasons and rates correspondingly low. Fluctuations are ordinarily rather marked from season to season. Money rates will be low from about the first of the year to the middle of February, after which they tend upward through March and into April. The market then normally grows weaker until about July. The rates swing upward again from about the first of August to October, after which time the higher level is ordinarily maintained until well on in December. When conditions are normal, it is evident that in the latter part of the winter and early in the spring there is a demand for funds to finance the usual business activities following the winter season—building, construction of various sorts, transportation in the interior, and particularly the planting of crops. Again, in the last four or five months of the year there is an extra demand for loans to finance the harvesting and moving of crops as well as the storage of commodities. Post-war conditions and the recent rapid decline in rates have tended somewhat to obscure the seasonal fluctuations.

3. The *duration* of the loan will also influence the rate. "Call money" can frequently be had at little more than a nominal rate, while a six months' loan might be rather difficult to make at a favorable rate. Much depends upon the banker's forecast of the future. When money is "scarce" and stock market speculation very active, there are times when even "call" or "demand" loans carry a very high rate. In 1919, for example, the rate went as high as 30 per cent, while the record high point of earlier years is much above this. Call loans, however, since they are used mainly for stock market purposes, are of only indirect interest to the commercial borrower.

It will be found ordinarily that loans running from four to six months command a higher rate than shorter loans. It is difficult for the banker to forecast the future and to be certain of the trend of conditions. His risks, therefore, are normally greater for the longer loans. The relation between the rates charged for longer and shorter loans is clearly shown in the table already cited (Table 38).

4. The *nature* of the *risk* will also affect the rate. Prime risks command the most favorable rates. The primary factors affecting the risk are such as the following: (*a*) the type of business; (*b*) the character of management; (*c*) the age of the business; and (*d*) the purpose of the loan.

5. In a country such as the United States the *geographical location* also affects the interest charged to commercial borrowers. In the southern states and in some of the far western states rates are normally as much as two per cent higher than those prevailing in the eastern manufacturing districts. It is usually found also that in the large cities where funds are plentiful rates are customarily lower than in the smaller places in the same part of the country. The element of risk may perhaps enter into this factor to a small extent, although the geographical difference in rates probably depends more upon the local needs as compared with the supply of loanable funds. While it has been the aim of the Federal Reserve System to bring about a more even distribution of loanable funds throughout the country, through the development of "inter-district" lending operations, comparatively little standardization has hitherto been apparent in the rates.

The accompanying table (Table 39) indicates in an interesting manner the wide differences in rates prevailing at a recent date in different sections of the country and for different types of loans.[1]

6. In a particular instance the rate charged to the customer may be greatly influenced by the relations existing between that customer and the lending bank. If the customer has kept his bank lines fully protected and has supplied his banker with full information regarding his condition, other things being equal he will secure the benefit of a lower rate.

7. A new customer will frequently be charged a higher rate than a borrower of long standing. The difference may be due to a number of considerations. Naturally the bank might regard the new customer as a less certain risk than the seasoned customers. Also, it is not yet certain how profitable his account

[1] From *Federal Reserve Bulletin*, June, 1922, page 754.

may become. In times of financial stringency, particularly, old customers will secure the more favored rates, while a bank at such times frequently refuses to take on a new customer.

8. Likewise, the small borrower must frequently pay a higher rate than the large borrower. The economic reason for this difference in rate is obvious, since it costs the bank as much, frequently more, to handle the account of a small customer whose affairs are not so well known. Of course there are circumstances under which the banker may wish to foster the growth of a small enterprise and will accordingly give favorable rates. Competition among banks, also, regulates this

TABLE 39

DISCOUNT AND INTEREST RATES PREVAILING IN VARIOUS

District	City	Prime Commercial Paper												Interbank Loans		
		Customers'						Open Market								
		30 to 60 Days			4 to 6 Months			30 to 60 Days			4 to 6 Months					
		H.	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*
No. 1	Boston	5	4¼	4¾	5	4½	4¾	4¾	4¼	4½	4¾	4¼	4½	5	4½	4½
No. 2	New York[1]	7	4½	5	6	4½	5	4¾	4¼	4½	4¾	4¼	4½–4¾	7	4½	5–5½
	Buffalo	7	5	6	7	5	6	5½	4¼		5½	4¼		8	5	
No. 3	Philadelphia	6	4½	5½	6	4½	5½	5	4	4¼	4¾	4	4¼	6	5	5½
No. 4	Cleveland	7	5	6	7	5	6	...			...			6	5½	5½
	Pittsburgh	6	5	6	6	5	6	5	4	4½	5	4	4½	6	6	6
	Cincinnati	6	5	6	6	5½	6	6	5	6	6	5½	6	6	5	6
No. 5	Richmond	6	5	6	6	5	6	4¾	4½		4¾	4½		6	5	6
	Baltimore	6	5½	6	6	5½	6	...			...			6	5	5½
No. 6	Atlanta	8	5	6	8	5	6	5½	4¾	5	5½	4¾	5	8	5	6
	Birmingham	7¾	6½	7	7¾	6½	6¾	6¼	5 1/6	5 11/12	6¼	5 1/6	5 11/12	6¾	5¼	6¾
	Jacksonville	8	6	7	8	7	7	...			5½	5½	5½	8	7	7
	New Orleans	8	3⅝	6–7	8	5½	6–7	...			...			7	5	6–7
	Nashville	...			...			...			...			...		
No. 7	Chicago	6½	4¾	5–6	6½	4¾	5–6	4¾	4¼	4½	4¾	4¼	4½	7	5	5½–6
	Detroit	6½	5½	6	6½	5½	6	5	4¼	4½	...			6	5	5½
No. 8	St. Louis	6	4½	5½	6	4½	5½	5¼	4¼	4½	5¼	4¼	4½	6	5	5½
	Louisville	6	5	6	6	5	6	5½	4¾	5	5½	4¾	5	6	5	5½
	Memphis	8	6	6½	8	6	7	...			...			7	6	6
	Little Rock	8	6	7	8	6	7	...			5	4½	4½	7	6	
No. 9	Minneapolis	6½	6	6	6½	6	6	...			...			7	6	6
	Helena	8	7	7	8	7	7	8	7	7½	8	7	7½	8	7	7½
No. 10	Kansas City	8	5	6	8	5	6	6	4¾	5	6	4¾	5	7	5	6–7
	Omaha	7½	5¼	6½	7½	5¼	6½	5	4½	4¾	...			7½	6	7
	Denver	8	5	6–7	8	5	6–7	4¾	4¼	4½	4¾	4¼	4½	8	6	7
	Oklahoma City	10	6	7	10	6	7	7	5½	6	6	6	6	8	6	7
No. 11	Dallas	7	5	6¼	7	5	6¼	7	6	6½	7	6	6½	7	5½	6
	El Paso	10	6	8	10	8	8	5½	4¾	5	10	8	8	9	6	8
	Houston	7	5	6	7	5	7	...			...			6½	5	6
No. 12	San Francisco	6½	5½	6	6½	5½	6	5	4¼	4½–4¾	5	4½	4½	6½	6	6
	Portland	8	4	7	8	6	7	5	4	4½	5	4¼	4½	7	6	7
	Seattle	8	6	7	8	6	7	5	4¼	4½	5	4¼	4½	7	6	7
	Spokane	8	6	7	8	6½	7	5	4¼	4¾	5½	4¾	5	7	7	7
	Salt Lake City	8	6	7	8	6	7	...			...			8	6	7
	Los Angeles	8	4½	7	8	5	7	7	4¾	5	6	4	5	8	5	6½

[1] Rates for demand paper secured by prime bankers' acceptances, high, 4½; low 3; customary, 3½.

matter to a large extent, so that probably *too* much encouragement is given to borrowers whose resources are scarcely sufficient to warrant their application to the bank for a loan. It is a question how far the multiplicity of very small and uneconomical enterprises in this country should be encouraged to borrow from the banks with the lure of low interest rates.

Finally, the point should be stressed that a customer who wishes to maintain pleasant and profitable relations with his bank should furnish frequent statements of condition without waiting to be asked for them. Whether he is borrowing or not,

TABLE 39 (Cont.)

CENTERS DURING 30-DAY PERIOD ENDING MAY 15, 1922

Bankers' Acceptances, 30 to 90 Days						Collateral Loans—Stock Exchange									Cattle Loans			Secured by Warehouse Receipts			Ordinary Loans to Customers Secured by Liberty Bonds		
Indorsed			Unindorsed			Demand			3 Months			3 to 6 Months											
H.	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*	*H.*	*L.*	*C.*
3¼	3⅛	3⅛	3⅜	3⅛	3⅛	5	4½	4½	6	5	5½	6¼	5¼	5¾									
3½	3⅜	3⅜	4¾	3¼	3⅜	6	3½	5	6	4	4–5½	6	4¼	4¼–5½							5½	4	5
7						7	5	6	7	5	6	7	5	6							6	5	6
4¾	3⅛	3⅜				6	4½	5	6	4½	5	6	4½	5				6	5	5½	6	4½	
6	3½	3¾	6	3½	3¾	7	6	6	7	6	6	7	6	6							7	6	6
3⅜	3¼	3⅜	3½	3⅜	3½	6	6	6	6	6	6	6	6	6				6	6	6	6	6	6
4	4	4	4	4	4	6	5	6	6	5½	6	6	5½	6	6	5	6	6	5	6	6	5	5
						6	5	6	6	5	6	6	5	6				6	5	6	65		6
						6	5½	6	6	5½	6	6	5½	6							6	5½	6
6	5½	5½	6	6	6	8	6	6	6	6	6	8	6	6				8	5½	6	8	5	6
						7½	6	6⅔	7½	6	7	8	6	7	8	8	8	7½	6½	7	7½	6	6¾
						8	6	7	8	6	7	8	6	7				8	7	8	8	6	7
7	6	6½	5	3½	4–5	8	5½	6–7	8	5½	6–7	8	6	6½–7				8	5½	6–7	8	5½	6–7
			3¼	3¼	3¼	7	5	5–6	7	5	5½–6	7	5	5½–6	6	6	6	6	5		6	5	5–5½
3⅝	3⅛	3⅜	3½	3⅛	3⅛	7	6	6	7	6	6	7	6	6				7	6	6½			
4	4	4				6½	5	5½	6½	5	5¾	6½	5	5¾	7	6	6½	6	5	6	6½	5	5½
						6	5	6	6	6	6	6	6	6				6	6	6	6	6	6
						8	6	7	8	6	7	8	6	7				7	6	6	7	6	6
						8	7	8	8	6	8	8	6	8	8	8	8	8	7	8	8	6	7
						7	6	6	7	6	6	7	6	6				7	6	6	6½	6	6
						8	8	8	8	7	7½	8	8	8	7½	7	7½	8	8	8	8	8	8
						7	5	6	8	5	6	8	5	7	8	6	7	8	6	6–7	6	5½	6
						8	6½	7	8	6	7	8	6	6	8	6	7	8	6	7	6½	6	6½
						8	5½	6–7	8	5½	6–7	8	5½	6–7	8	6	6–7	8	6	6–7	8	5	6–7
						10	6	8	10	6	8	10	6	8	10	6	8	10	7	8	10	6	7
						8	6	6½	8	6	6½	8	6	6½	7½	7	7½	8	6	6½	8	5½	6½
						10	6	8	10	6	8	10	6	8	10	7	8	10	6	8	10	6	8
						8	6	7	8	6	7	8	6	7	8	7	7	8	7	8	7	5	6
4	3½					7	6	6	7	6	6	7	6	6	6½	6	6	6½	6		6	6	6
3⅜	3⅜	3⅜				8	3	7	8	6	7	8	6	7	8	6½	7	8	6	7	8	6	7
3½	3⅜	3½	6	4	6	8	6	7	8	6	7	8	6	7				8	6	7	8	6	7
						8	6	6	8	7	7	8	6	7	8	8	8	8	7	7	8	6	7
						8	7	8	8	7	8				8	7	8	8	7	8	8	6	7
5½	3¼	3¾	4½	3¼	3⅜	7	4½	7	8	5	7	8	5	7	8	7	7	10	6	7	8	6	7

this rule should be followed. Bankers are at present unusually active in the matter of requiring frequent financial information from their clients. Many bankers who formerly took their customer's business largely for granted and did not even ask for a statement, are now demanding semi-annual and even quarterly balance sheets and records of operation in addition to the annual certified audit. In all these matters it is the bank's duty to make absolutely clear to the borrower what is expected of him, and then the borrower should not delay his action until it becomes necessary for the credit department to "revise" its files.

BORROWING FROM MORE THAN ONE BANK

The question is frequently raised as to whether it is a wise policy for a borrower to deal with more than one bank. No dogmatic answer can be given. When the business is large and national in scope, and when branches or factories are located in different sections, it is usually necessary to patronize several different banks, both for the sake of convenience and also because no one bank may be large enough to give the borrower an adequate line of credit. It is not usually desirable for a bank to lend its customer up to the highest *legal* maximum. Many bankers advise their clients, after a certain point, to open up lines with other banks. This practise is frequently wiser, both for the borrower and for the creditor, particularly when the peak of prosperity has been reached and there may be danger of a rapid decline in prices. The larger business concerns deal with a number of banks as a matter of self-protection. Some large companies open up lines of credit in the financial centers merely for "advertising" purposes, even when their local banks can adequately finance them. Some bankers, indeed, seem to have encouraged such a policy, though from the business man's point of view it is of very doubtful expediency.

It is a mistaken notion, however, that the small borrower should open up accounts with several banks in order to secure more favorable interest rates. Such a policy will usually act

as a boomerang. If the lines at different banks are kept "open" it will be necessary to maintain the usual deposit requirements. This would be an expensive procedure. If the lines of credit are not kept open, the miscellaneous banks will feel under no obligation whatever to assist a small borrower who has been "shopping around" in this manner. The best practise is for the small business man to stick to the local bank which he has chosen, to advise frequently with its officers, and to abide by the requirements which they impose. Under such circumstances the bank will be under a definite moral obligation to assist the borrower to the utmost in times of business uncertainty or reverses.

THE INFLUENCE OF THE FEDERAL RESERVE BANKS

Inasmuch as the Federal Reserve Act has in certain respects greatly influenced the lending policy of the member banks, brief mention should be made of the "rediscount" privilege, in accordance with which any Federal Reserve Bank may rediscount for any of its member banks eligible notes, drafts or bills of exchange, issuing in return therefor Federal Reserve Notes, which are ordinarily secured by rediscounted commercial paper up to the full value of the notes, plus a 40 per cent gold reserve. In order to be eligible for rediscount these loans made by the member banks must conform to certain requirements, chief among which are the following:

1. The paper presented for rediscount must at the time have a maturity of not more than 90 days exclusive of days of grace. If drawn or issued for agricultural purposes, or based on live stock, nine months' maturity is allowed.

2. The loan must have arisen out of actual commercial transactions; that is, the note, draft or bill of exchange must be issued or drawn for agricultural, industrial or commercial purposes and the proceeds must be used for such purposes. On this particular point the regulations of the Federal Reserve Board are very specific, and the Board has defined the character of a note, draft or bill of exchange eligible for rediscount as follows:

(*a*) It must be a note, draft or bill of exchange which has been issued or drawn, or the proceeds of which have been used,

or are to be used in the first instance in producing, purchasing, carrying or marketing goods in one or more stages of the processes of production, manufacture or distribution, or for the purpose of carrying or trading in bonds or notes of the United States.

(*b*) It must not be a note, draft or bill of exchange the proceeds of which have been used, or are to be used, for permanent or fixed investments of any kind such as land, buildings or machinery, or for any other capital purpose.

(*c*) It must not be a note, draft or bill of exchange the proceeds of which have been used, or are to be used, for investments of a purely speculative character or for the purpose of lending to some other borrower.

(*d*) It may be secured by the pledge of goods or collateral of any nature, including paper which is ineligible for rediscount, provided it (the note, draft or bill of exchange) is otherwise eligible.

3. The aggregate of notes, drafts and bills bearing the endorsement of any one borrower and rediscounted by any one member bank shall at no time exceed more than 10 per cent of the unimpaired capital and surplus of such bank. This restriction, however, does not apply to paper which is secured by government bonds nor does it apply to the discount of bills of exchange (acceptances and the like), drawn in good faith against actually existing values.

4. The paper presented for rediscount must be endorsed by a member bank, and the bank must also certify that a recent financial statement of the borrower is on file with it. Ordinarily a copy of this statement would be presented with the paper brought for rediscount. When, however, a note discounted by a member bank for a depositor is secured by a warehouse, terminal or other receipt covering goods in storage, a statement of condition is unnecessary. Also if the aggregate obligations of the borrower rediscounted are less than $5,000 or less than 10 per cent of the paid in capital of the member bank, a statement of condition is unnecessary.

5. A promissory note for the purposes of the foregoing regulations is defined as an unconditional promise in writing signed by the maker to pay in the United States at a fixed or determinable future time a certain sum in dollars to order or to bearer.

The foregoing regulations of the Federal Reserve Board have sometimes been misrepresented by the member banks when they have wished to refuse loans to their customers. Hoping to conceal their own strained financial condition or

to refuse loans to their customers without arousing antagonism, banks have sometimes explained their refusal to grant or extend loans by stating that they are forbidden to do so by the Federal Reserve Board rulings. In such instances the Federal Reserve Board has merely been used as a buffer to enable the bank to shift its own responsibility. Needless to say the Federal Reserve Board, as such, can exert no controlling influence over the loans of *member* banks. It can only suggest policies and define what type of loans shall be eligible for rediscount. The bulk of commercial loans, however, even when eligible, are not rediscounted at the Federal Reserve Banks. Therefore, the provisions of the law in this regard do not necessarily have any more than an indirect effect upon the situation.

THE INDUSTRIAL SERVICE OF THE BANK

In recent years a new field of service has been developed in many of the larger banks. Realizing that a bank in order to render constructive service must be more than a mere grantor of credit, some have organized definite *industrial service departments* or have at any rate featured their ability to give advice of a helpful sort to their clients. Within the year the writer has seen many notices in the New York papers advertising the ability of a particular bank to render constructive business advice to its clients. From some of these financial advertisements the following quotations are selected, every one representing a different bank.

> "We are business counselors. The efficient performance of our duties demands that we constantly keep in touch with all factors affecting the financial side of business. Markets, buying trends, credit, transportation, and foreign trade or conditions, are such factors.
>
> "This intimate contact with basic branches of commerce and industry often enables us to give business men practical information of value."

> "How much are you using your bank? Many men are unaware of the various ways in which a large bank with a sincere desire to help its depositors can be of service to them. Does

your bank, for instance, give you the advantage of its knowledge and experience gained from contact with practically every type of business?"

"When you bank at the . . . . Bank we are not alone interested in the funds you keep on deposit—our greater interest is in helping you to achieve the largest possible success in your chosen field.

"It is not enough that we safeguard your money. Our obligation is to place at your command every service and all counsel which will be of value to you. Ready for your needs is the knowledge and experience of an organization perfected through 130 years of intimate contact with all lines of business, and industrial activity.

"During our long career we have had opportunities to aid in the upbuilding of many enterprises through advice and assistance in matters of credit and finance and in helping to solve unusual business problems."

"What is a bank's advice worth? Obviously this question hinges on the age, reputation, and character of the bank itself.

"For 65 years substantial merchants and manufacturers throughout the country have been coming to the . . . . Bank with matters of paramount importance to them, requesting definite and well-considered counsel. They still come and we still give the seasoned advice and painstaking assistance which have characterized our service since 1856."

1921 AD

"Founded in 1799, the . . . . Bank has seen the beginnings and in many cases helped to foster the growth of some of our most important industries. Its grasp on the factors involved in present-day industry, together with its background of experience covering the entire period of industrial development enables the bank to offer a service of exceptional merit."

Such are some of the general testimonials which certain well-known banks have given themselves in their advertising. Many banks have no use whatever for so-called industrial service and believe that their function should be restricted to making loans and not to giving advice to the business man about matters which he is in a better position to judge than they. Bankers are, of course, not omniscient. But it is rather difficult to see how in these days of competition among banks

so antiquated a point of view can long survive. It is certainly time for such banks to begin to inform themselves more minutely regarding conditions in those businesses to which they lend their credit. Otherwise, their work is little more than that of automatons.

Specifically, three types of industrial service have thus far been developed by a few banks.

1. One form of this service extends little beyond the collection of useful information for the purpose of distributing it to the bank's clients. This sort of service may in many instances be of considerable value. However, inasmuch as it is from a business point of view rather ancient history by the time it reaches the customer in this impersonal sort of way, there is a doubt as to how much the borrower gains. There are already almost enough information disseminating institutions of various sorts.

Meow

2. Another type of industrial service is rendered very much in the nature of a *post mortem* ceremony. Certain very prominent banks have well organized statistical and industrial departments whose function seems to be to assist largely in trying to solve the financial difficulties of some of their clients, after they have become unable to meet their loans when due. Much of the service thus rendered has been purely "rescue party" performance. Out of the knowledge thus gained, however, it is probable that the banks now rendering such service in self-defense, will ultimately be in a position, through constructive advice, to prevent the financial difficulties, the evils resulting from which they are at present attempting to remedy.

3. The third type of industrial service is of a more constructive sort, organized primarily to work in cooperation with the credit department of the bank and to make deeper analyses than could be made from a mere study of the balance sheet. There is practically no limit to the possibilities of usefulness along these lines both for paid and unpaid service. A bank in New York City which has been a leader in the field writes as follows regarding its own industrial department:

"1. We cooperate with the credit department of the bank and make a constructive examination of the borrower's business.

"2. Advisory service is rendered to corporations with reference to their finances and operations.

"3. Special investigations are made for corporations looking toward the establishment of modern systems of operation.

"4. Advice is given on matters of accounting in addition to other services along similar lines.

"5. Service is rendered to groups of manufacturers desiring to merge or consolidate. This involves a partial determination of the possibilities of such consolidations and their relation to industry as a whole; also the determination of the relative worth of the individual concerns in the consolidation.

"6. The department also acts with creditors' and security holders' committees and makes special examinations in cooperation with such committees.

"7. Examinations are also made for investment houses with a view to determining whether new financing is needed and if so the type of finance which will probably be best for the concern.

"8. In frequent instances examination of a business is made at the request of the concern itself with a view to pointing out weak spots and suggesting methods of improvement."

The bank in question reports that during the three years of its existence the industrial department has paid its own expenses and has made some money. This service is good so far as it goes, but probably the development has not yet gone far enough in certain constructive directions. It cannot be too strongly stressed that the average concern tries to do too much business on credit and that the attitude of the bankers themselves has frequently been responsible for this situation. It is sometimes urged that the bank cannot afford to expend the money necessary to develop a worth-while industrial department. Such a department, however, can soon be more than self-supporting, and even if this were not the case the losses incurred during the past two years *on only one borrowing account,* would frequently be sufficient to finance a well-equipped economic and statistical department in the larger banks over a period of years.

It has sometimes been contended that a bank in attempting to develop service along these lines is assuming an im-

proper function. Some critics suggest that the work is more properly that of the engineer or industrial expert. Such, however, does not seem to be the case, since the bank can have in its own employ all the expert service needed. The chief objections to depending upon industrial engineers are the following:

(*a*) The engineer usually thinks in too narrowly mathematical terms. His advice will tend to be technical rather than financial. (*b*) The advice of the engineer usually comes too late, after the company has already encountered its difficulties. (*c*) Outside assistance of this sort is usually very expensive. (*d*) Frequently the questions raised are of a very intimate sort, which the banker should know at all events, and which it is not necessary to impart to outsiders. (*e*) From its numerous and close business contacts the bank is in a position to have more useful comparative information than the engineer would probably be able to secure.

THE FUTURE OF COMMERCIAL BANKING

There still remains a vast field as yet little cultivated for the development of *cooperation* between banks and industries. The banks have probably not made sufficient analytical use of the invaluable material in their possession, nor have they until recently secured detailed statements of conditions with desirable frequency from their clients. There has been too much guessing on the part of the lender and the borrower. It should be the banker's function to obtain more information and carefully to analyze and interpret the data in his possession. Thus by making a dynamic study of the credit situation in the different types of industry, and by careful interpretation of the results, it might be possible to give such constructive financial advice to business men as would enable them to avoid many of the pitfalls into which they now tumble through a failure to conduct their operations with a view to current trends in business conditions.

All economic laws are approximations. No rigid rules can be laid down. To base credit granting solely on statistical

standards is as unsafe as to make only character and capacity the criterion. Yet the statistics when properly interpreted no doubt usually reflect the character and the capacity of a firm's officers in a rather intimate way. The fact that we still have so many business calamities, so many peaks and valleys in our business cycle, shows that there is some maladjustment somewhere which can probably be remedied when the conditions are sufficiently understood. It would seem that the banks through a more careful study, and as a result of greater co-operation with each other and with industrial concerns, might give constructive advice and force compliance with this advice in time to prevent many a catastrophe. Thus the curves of the business cycle might gradually be somewhat flattened out, much to the financial gain of the business concerns themselves, the banks, and the community at large.

CHAPTER XVI

THE BUSINESS AND THE COMMERCIAL PAPER HOUSE

Various types of commercial paper defined—Commercial paper in the technical sense—The commercial paper house—Investigating the risk—The technique of buying and selling commercial paper—Investigation by the purchaser—Risks run by the note broker—The open market and the borrower—Advantages—Disadvantages—The open market and the banker—Advantages—Disadvantages from the banker's point of view—General observations.

FEW terms used in banking practise have been more generally misunderstood by the average man than "commercial paper." As a matter of fact the term, as used in its broader and more popular sense, includes practically every kind of negotiable instrument of indebtedness which can be used for borrowing purposes, whether or not arising out of actual commercial transactions. In the more limited sense in which the term is used by the Federal Reserve Board with reference to paper which is commonly sold in the "open market" and which is eligible for rediscount at Federal Reserve Banks, "commercial paper" may be defined as follows:

Notes, drafts or bills of exchange issued or drawn for agricultural, industrial or commercial purposes, or the proceeds of which have been used or are to be used for such purposes, that is in producing, purchasing, carrying, or marketing goods in one or more of the steps of the processes of production, manufacture or distribution.

In other words commercial paper may be broadly defined as those negotiable instruments of indebtedness which are expected to be liquidated at maturity through the sale or transfer of those goods on account of which the obligation is incurred. Commercial paper as thus defined includes the following:

1. Of most importance is the *promissory note*, or "single name" paper, which is occasionally "endorsed" or "guaranteed"

and sometimes secured by collateral, in which case it becomes a "secured" note. For our purposes the promissory note may be defined as a conditional promise in writing, signed by the maker, to pay at a fixed or determinable future date a definite amount of money to the order of a specific individual or concern, or to bearer.

2. *Drafts* and *bills of exchange* differ from the promissory note in that they are typical "two name" paper. Also, they may be secured by commodities or other collateral, or unsecured. A draft or bill of exchange may be defined as an unconditional order in writing drawn on one party (the *drawee*) by another (the *drawer*), requiring the party to whom it is addressed to pay at a fixed or determinable future date a definite amount of money to the order of a specified party (the *payee*). The instrument must be signed by the "maker" or "drawer," and the payee may be either a third party or may be the same as the drawer. It was formerly common to use the term "draft" in referring to domestic transactions, and "bill" or "bill of exchange" when foreign operations were involved.

(*a*) The term "banker's acceptance" is used to designate a draft or bill of exchange of which the acceptor (the drawee who has accepted it) is a bank or trust company or other similar organization.

(*b*) The "trade acceptance" may be defined as a draft or bill of exchange drawn by the seller on the purchaser of goods sold, and accepted by such purchaser *at the time of the sale of the goods.*

3. "Commodity paper" is a term properly used merely to designate certain *types* of notes, drafts, bills, or acceptances. In banking parlance at the present time commodity paper may be defined as a note, draft or bill of exchange accompanied and secured by shipping document (bills of lading, and the like) or by a warehouse or similar receipt, arising from the handling of readily marketable or non-perishable staple commodities. In like manner "agricultural paper" or "live stock paper" is merely a note, draft, or bill of exchange, the proceeds of which have been used, or are to be used, for agricultural or cattle raising purposes in the broader sense.

Countless terms may be used in designating a specific type of commercial paper, either from the legal point of view or in relation to the nature of the transaction which gave rise to the use of the instrument. Paper which does not arise out of actual commercial transactions as above defined, may be based upon stock exchange transactions such as promissory notes secured by collateral or may represent merely a financial transaction of some sort. It may even be in the form of "accommodation paper" which represents no *bona fide* transaction whatever. It can readily be seen, however, that for our present purposes so-called "commercial paper" falls into only two classes, namely, promissory notes, usually "single name" paper, and bills or drafts, always "double name" paper. An "acceptance" is merely an accepted draft. The promissory note was partially discussed in connection with bank loans and will be further mentioned in the present chapter. The acceptance, so far as its chief interest to the business man is concerned, will be reviewed in the following chapter.

THE REAL MEANING OF COMMERCIAL PAPER

Commercial paper in the strict sense of the term, as used in the financial district, means simply those unsecured promissory notes which are issued by merchants and manufacturers to supply them with funds with which to finance current business transactions and which are discounted (or sold) through the agency of commercial paper houses (or "note brokers"), and are not given directly by the borrower to his bank. Formerly the individual or firm which acted as middleman between the borrower and the purchaser of his notes, was commonly designated a "note broker," since he was in a very real sense a "broker of credit" as he risked none of his own capital in the transaction, but merely brought together the parties who wished to borrow and those who were ready to lend. Within recent years, however, there have developed a few large organizations of national scope in whose hands center practically all of the borrowing operations of this type. These are com-

monly referred to as "commercial paper houses." When a company distributes its promissory notes in the manner indicated, instead of borrowing directly from its bankers, it is said to "sell paper on the open market."

Before outlining the *modus operandi* of the commercial paper market it is well to note that practically all of the commercial paper sold passes through the hands of about 30 "houses" or "dealers." In fact, only 15 or 16 of these organizations are of really national scope, and they handle the greater part of all transactions. In addition to the commercial paper houses above mentioned there are perhaps an equal number of very small note brokers whose operations are merely local and who ordinarily deal in rather doubtful paper. The larger houses frequently sell on the average a million dollars' worth of paper per day or even considerably more. The total amount of paper outstanding from time to time varies within wide limits according to general business conditions as well as according to the season of the year and the money market conditions. The maximum amount of commercial paper outstanding at any one time in recent years was about $1,300,000,000 early in 1920. At the end of 1921, however, only $666,000,000 was outstanding and only $383,000,000 at the end of 1928. While the *total* annual issue of such notes is not definitely known it is probable that the maximum figure estimated on the basis of average maturities of three or four months was at least $4,000,000,000 in the year 1920, and about $1,300,000,000 in 1928. At times some banks have carried a very high percentage of their unsecured time loans in the form of commercial paper which they have purchased through dealers.

The number of business houses borrowing through the *commercial paper* houses is comparatively small. In 1920, 4,395 concerns offered their paper in the open market, while in 1928 the number had fallen on account of prosperous conditions to about 1,200 to 1,500. It is estimated that there are probably from 8,000 to 9,000 concerns which have at one time or another sold paper through note brokers. A detailed record of the "open market" names for 1922, classified according to basic lines of industry, shows the following percentages of borrowers, according to the National Credit Office of New York City:

Textiles, 32.5 per cent; foodstuffs, 22.8 per cent; rubber (tires) and leather (shoes), 8.9 per cent; hardware and metals, 18.2 per cent; lumber, paper, and furniture, 9.2 per cent; and miscellaneous, 8.4 per cent. The relative proportion of borrowers had not changed much in 1928.

INVESTIGATING THE RISK

A first-class commercial paper house must exercise unusual caution in deciding whether to sell the paper of a would-be borrower. As the note broker's customers are practically all bankers, any error in his judgment will not only be injurious to his own business but may be very harmful to the borrowing concern. Paper sold on the open market is usually subject to extraordinary scrutiny. Hence the need for the utmost caution. The following suggestions, therefore, may be worth noting along with the more general considerations raised by the commercial banker:

1. Certain businesses are too small to sell their paper through brokers. These must be eliminated by the commercial paper house in deciding upon its policy. Opinions differ as to the minimum size of company which can safely borrow on the open market, and as a rule only the less known brokers will accept the paper of the smaller concerns. Formerly the better commercial paper houses preferred not to do business with a borrower whose net worth is below $300,000 to $400,000. Much, of course, will depend upon the type of business and management, and recently a business with a capital of even $200,000 or less can find a sale for its paper. Ordinarily, however, it has been found to be a most unwise policy for the small concern to borrow in this way. Its needs can readily be cared for by the local bankers.

2. There are certain types of business which do not as a rule find it possible to sell their paper on the open market. Among these may be mentioned (*a*) the producer of or dealer in highly "fashional" goods, luxuries, and the like; (*b*) those lines of business in which the turnover of inventory is very slow as in the case of manufacturers of heavy machinery; (*c*) those engaged in handling products which are subject to very rapid fluctuations in value or for which the demand is not

definitely known; and (*d*) comparatively new concerns which have not yet fully demonstrated their capacity even though they might be engaged in handling a staple commodity.

3. If the broker decides that the applicant for a loan is not debarred for the reasons just mentioned, it is important as a starting point in the investigation to require a full and properly audited statement of condition. Liquidity of current assets is of even greater significance for a company which wishes to borrow on the open market than for one which borrows from the bank. The open market is not sympathetic, and notes thus sold *must* be paid at maturity. No risks can be run. The following points indicated in the statement should, therefore, be carefully watched:

(*a*) The current ratio should be higher than that normally expected in making bank loans.

(*b*) The "quality" of the current assets should be very carefully watched. It is rather important that the cash and receivables exceed the accounts and notes payable *after* the loan is made.

(*c*) Contingent liabilities of every description should be looked for, and as a rule interpreted in the most unfavorable light.

(*d*) It should be ascertained whether the concern is borrowing through other channels, whether it is using its bank lines at the same time that it proposes to sell paper on the open market, and the peak of its borrowing should be ascertained.

(*e*) For the sure protection of the borrower, full insurance must be carried on all inventory.

4. A comparative record of earnings covering several years' time is also significant. A company whose net earnings have not been at least 7 per cent or 8 per cent on the invested capital is not making enough money, and should confine its borrowing operations to those banks which can advise it closely and keep watch over its operations.

5. The business which wishes to borrow in this way should keep its bank lines "open" and amply protected by deposits. In fact there should be reserve bank lines equal to the full amount of the open market borrowings. Many a business has gone wrong at this point, much to its sorrow.

6. It should also be determined that the intended loan is for strictly commercial purposes, that is, it must ordinarily be incurred only in connection with the purchase, production, carrying, or distribution of goods. The paper should be self-liquidating. The proceeds of the transaction which it finances should afford the means of payment at maturity. It is extremely important to know that the company has planned its financial operations so that its funds will be ample to meet the notes at their due date.

7. Finally, the more intangible factors of character and capacity are given a very high rating by commercial paper houses. The nature and quality of the management is of the utmost importance. If the broker is not satisfied in this regard he should refuse the loan no matter how excellent the financial condition may appear to be.

8. The broker in taking on a new name which is well known to him may be able to decide readily whether or not he wishes to sell the paper. Unknown names, however, must pass through the most careful scrutiny in addition to the information which can be secured through audited statements. It is customary to make use of the various *credit reporting agencies* in this connection, and particularly to write to numerous trade references of recent date, and to banks—preferably banks at which the customer *does not* have a line of credit. It should, of course, be understood that a company's own bank may not feel free to disclose *all* it knows about its customer. An outside bank, on the other hand, can reply to inquiries of the proper sort without betraying any confidences. Hence replies from this source should be of particular value. Trade references are deemed by many of great value as they frequently disclose the policies and methods of the borrower which would probably be unknown or overlooked by the usual financial references.

It should further be noted that a company, which has been borrowing from the banks and paying its trade bills promptly, will doubtless receive a clean bill of health from the trade, no matter what its *actual* financial condition may be. Similarly a company which has kept its bank lines open will presumably receive a favorable report from its bank. Hence great caution must be exercised in interpreting reports which are received, in order that all elements may be carefully weighed. There are times when favorable reports both from the trade and from a company's own bank may mean little, if anything.

From the foregoing suggestions, it is evident that only the larger and stronger concerns will be able to stand the scrutiny to which they should be subjected when they desire to sell their paper on the open market. The sort of information which is of particular interest to the commercial paper house is indicated by the accompanying schedule which is used by one of the larger brokers:

CONFIDENTIAL CREDIT INFORMATION

TO BOND & GOODWIN

FOR THE PURPOSE OF PROCURING CREDIT WITH YOU ON OUR NEGOTIABLE PAPER OR OTHERWISE WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR CONDITION ON ....19.......AS PER INVENTORY OF..................19.......

1. *a*. Name of company:
   b. Address:
   c. Business:
   d. Branches:
   e. When was business established?
   f. Is Company incorporated? If so, in what State?

2. *a*. Officers or Partners:
   b. Directors:

3. *a*. Do you place any of your paper through other brokers? If so, whom and in what territory?
   Broker Territory
   b. How much have you outstanding through them at the present time?
   c. What were the maximum outstandings through your brokers last year?

4. *a*. Bank Accounts:
   b. Lines Granted:
   c. What have you with them now?
   d. Do you borrow direct from any banks other than those with whom you have accounts?

5. *a*. How much of your receivable items is due from merchandise sales?
   b. What amount due from officers and directors?
   c. What amount due from subsidiary companies?
   d. Segregation of accounts and notes receivable if not segregated on statement:
   e. Have any of your notes receivable been discounted? If so, to what extent?
   f. Have any of your accounts receivable been assigned? If so, to what extent?
   g. Give amount of receivables overdue and not charged off at statement date:
   h. Amount of receivables charged off at statement date?

6. *a*. Basis upon which inventory was valued:
   b. Segregation of inventory into finished merchandise, merchandise in process and raw merchandise:
   c. Amount of inventory when last taken? Date:
   d. Any merchandise held on consignment? If so, is this included in merchandise shown on statement?
   e. Any merchandise held under Trust Account?

7. *a*. Basis upon which real estate and plant were valued:
   b. Are your real estate and plant clear from mortgages? If not, amount— rate— maturity—
   c. Who holds title to your real estate?
   d. Cost of real estate and plant.

8. *a*. Are any of your accounts or bills payable due to any officers, directors or stockholders?
   b. If so, to what extent?

9. Did you have any contingent liabilities on statement date? If so, how much and of what nature?

10. *a*. Do you borrow on collateral?
    b. Have you any notes outstanding of a character different from those sold in the open market?

11. If notes are endorsed:
    a. Outside worth of endorsers:
    b. Do they endorse for any other company?

12. *a* Do you always discount your merchandise bills?
    b. Do you give notes for merchandise?

13. Deposits—
    a. From endorsers
    b. From others
    c. Interest
    d. Time or demand

14. Insurance:
    a. On lives of officers, payable to Company Officer Amount
    b. Other—Plant, merchandise, etc. Kind Amount

15. *a*. Maximum debt during last fiscal year: Date:
    b. Minimum debt during last fiscal year: Date:

16. Have you any Funded Debt? If so:
 a. Amount authorized:
 b. Amount outstanding:
 c. Date of issue:
 d. Maturity:
 e. Rate:
 f. Security:

17. Please send us signed statement for the past year and copy of your surplus account and your profit and loss account.

18. Date of fiscal year.
 a. Is your statement audited? By whom:

19. Operating details for the past year:
 a. Sales:
 b. Net earnings from operations:
 c. Other income:
 d. Net earnings before taxes and dividends:
 e. Federal Taxes paid: Covering what period:
 f. Res. for Federal Taxes:
 g. Dividends past year:
  Common Preferred
 h. Depreciation charges: Plant Merchandise Other

20. a. Name and location of subsidiary companies:
  Capitalization: Amounts owned by your company:
 b. Do branches or subsidiaries borrow independently?

21. Are you planning any new expansion in business, change in policy and new financing for the coming year?

22. Are there any suits pending against your company?

23. To what date has the Internal Revenue Dept. examined and approved your Income Tax Returns?

24. a. Terms of sale:
 b. Terms of purchase:

25. Trade references:

26. Did the company have any purchase contracts on statement date? Amount:

If at any later date we make any change in our methods of financing, it is understood that we will advise you.

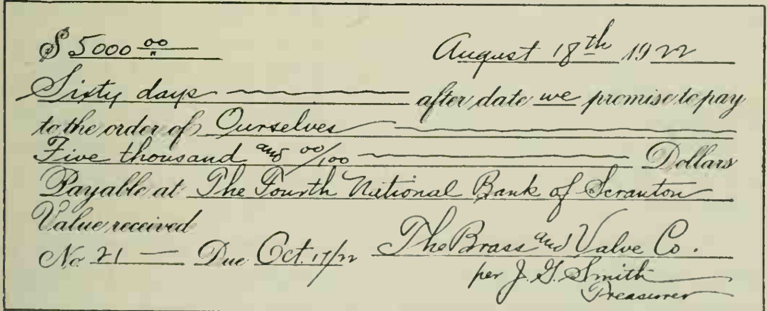
Signed....................................

Date.................. By..........................

THE TECHNIQUE OF BUYING AND SELLING COMMERCIAL PAPER

Provided the broker is willing to "take on" the company's paper, the procedure followed is of some interest. The size of loan will naturally vary according to circumstances. Formerly the larger commercial paper houses preferred not to handle a loan of less than \$500,000 to \$1,000,000, though they now go as low as \$200,000, and even much lower. Some were willing to take on the account if they can be assured that the *total* loans during the year will amount to the sum indicated. It must not be supposed, however, that the borrower signs only one promissory note for the entire amount. On the contrary, the loan is broken up into small "pieces," frequently as low as \$2,500, the commonest amounts being \$5,000 and \$10,000. It is necessary to use the lower denominations in order to find a market for the paper in the smaller banks, which according to law are forbidden to lend on unsecured notes more than 10 per cent of their capital and surplus to any one borrower.

The notes are customarily made payable to the order of the borrowing concern, signed by the borrower and endorsed by him in blank, and made payable at a designated bank. Thus the paper attains the highest degree of negotiability. Inasmuch as the purchaser of the note is unknown to its maker, it is, of course, impossible to designate a specific payee, and it would scarcely be a safe practise to make the note simply payable to bearer. A typical note is herewith inserted.


\$5000.00 August 18th 1922
Sixty days after date we promise to pay
to the order of Ourselves
Five thousand and 00/100 Dollars
Payable at The Fourth National Bank of Scranton
Value received
No. 21 — Due Oct. 17/22 The Brass and Valve Co.
per J. G. Smith
Treasurer

FORM 11. Typical Note Used in Open Market Borrowing

Most notes carry only the signature of the duly appointed borrowing officer of the concern without any endorsement whatever. In some cases the endorsement of officers who have extensive property outside the business is secured in order to lend strength to the note. It is, however, a great mistake to think, as has been asserted by some writers on the subject, that it is desirable to encourage the endorsement of notes of this sort, or that the endorsement of those not connected with the business lends strength. If a company's credit is really satisfactory, no amount of endorsement will improve it. If it is unsatisfactory, unlimited endorsement should not be sufficient to give it a market. A company without sufficient credit to enable it to finance itself publicly without assistance, should keep its affairs quiet and stay with the local bank. Moreover, the endorsement of officers, in the majority of cases may mean nothing whatever, while the endorsement of an outside concern—an "accommodation" endorsement—is a practise which no reputable house should resort to. "Prime" paper, therefore, is in almost all cases unendorsed.

The commercial paper house does not under any circumstances endorse or guarantee the notes which it handles. Its function is to sell the paper and to assure the buyer of the genuineness of the notes. Any endorsements very infrequently made by brokers for personal or friendly reasons are an exception of too little significance to be noted. However, one rather well-known commercial paper house, though it does not endorse the notes which pass through its hands, occasionally stamps the bill of sale as follows:

> "We hereby give you the right to return to us within 10 days after maturity for the face amount any or all of the notes described below if same remain unpaid after due presentation and protest, provided that at that time you own of the notes included in the above sale at least an equal amount of the same maturity."

The length of time for which notes run varies from a rare minimum of one month to a rare maximum of one year. Ordinarily the ranges are between sixty days and six months, the average maturity being probably not far from four months.

Since the broker charges a commission of one-fourth of one per cent on the face amount of the loan it is apparent that from the company's point of view it would be rather expensive to borrow for the briefer periods, since the frequent commissions would greatly increase the interest rate. The borrower, therefore, normally wishes the longer maturity, while the personal interest of the note broker would favor shorter maturities and frequent borrowings each year. The actual period for which the loan runs will, of course, be determined by factors similar to those noted in the preceding chapter in connection with the ordinary bank loans, as well as by an additional important consideration, namely, the financial needs of those *banks* which customarily buy paper on the open market.

There are several different methods used by a commercial paper house in handling the borrower's loan.

1. The old method, now little used, was for the broker to act merely as a "go between," charging his commission without actually buying the paper.

2. At the present time it is customary for dealers to buy the paper outright, advancing to the borrower the proceeds remaining after their commission has been deducted and the face of the note has been discounted at the agreed upon rate of interest. In this manner all the risk resulting from a possible change in interest rates before the paper can be sold is borne by the broker. For example, let us suppose that at the time when the paper is bought the market rate is 6 per cent, and that the maturity of the note is four months. The broker would then advance to the borrower 98 per cent of the face of the note less one-fourth of one per cent, so that he would actually pay 97¾ per cent for the note. If before the loan is sold, the rate for such paper should have increased to 6.75 per cent, obviously it would have to be sold to the purchaser at a discount of 2¼ per cent or for 97¾ per cent of the face value. Thus the broker's commission would have been entirely "wiped out" because of the increase of rates, though of course in the meantime he would have received interest on his investment, since the time to run would now be somewhat less than four

months. If, on the other hand, the rates had "gone off" to 5.40 per cent, for example, the broker would have gained one-fifth of one per cent on the transaction in addition to his commission. At least one well-known commercial paper house passes on to its clients the benefit of any lowering of the interest rates after paper has been purchased.

3. Occasionally brokers buy on "consignment," that is, the borrower authorizes them to sell notes up to a certain amount as they have an opportunity to do so. In this manner no risks are run by the note broker, though of course there is no possibility of gain through the change in interest rates.

4. Sometimes the notes are bought by the broker on a "margin." Only part of the face of the note is advanced to the borrower, the balance being given him when the notes are actually sold. By following this method the broker does not find it necessary to tie up any of his own capital as he can probably borrow from the bank up to 90 per cent of the face of the loan. When the paper is bought outright, however, the broker must supply the balance of 10 per cent of the amount of the loan out of his own capital while he borrows funds from the bank until the paper can be distributed.

The selling of commercial paper after due care has been exercised in purchasing, is not in itself in ordinary times a particularly difficult operation. The larger note brokers have offices in the leading financial centers through which distribution is made. They keep lists of banks and other institutions or private individuals which have temporary funds to invest, and send them at frequent intervals their list of "offerings," together with more or less detailed information regarding the financial condition and history of the concerns whose paper is offered. Salesmen are also employed by the central office who call upon banks in their particular districts. Much paper, however, is placed without any effort of this sort. Many banks on the broker's list will make known beforehand their desire to buy a certain amount of commercial paper of a specified maturity or of a particular company. City banks may thus purchase heavily for their country correspondents. Sometimes an entire issue is practically sold before it is even purchased

by the broker. There is given herewith a sample of the confidential credit information (Form 12) which usually accompanies the various offerings.

INVESTIGATION BY THE PURCHASER

The banker does not by any means always buy paper on the mere recommendation of the note broker. On the contrary, particularly if a city bank is purchasing for some of its country correspondents, the "name" will probably be very carefully investigated. The practise has consequently developed of offering paper on a "ten-day option," which may even be extended, depending upon the distance of the bank from the section of the country in which the concern is located. In accordance with this option the bank buys the paper offered, but in doing so is given the right to return it to the broker and receive the principal sum paid, together with interest, provided the paper after investigation is found to be unsatisfactory. On the "bill of sale," therefore, some such notice as the following is ordinarily stamped by the note broker.

> "The above notes may be returned by delivery at our office during banking hours on or before .... *(date inserted)*. This option is given for credit investigation only."

In the meantime the bank will endeavor to satisfy itself through various channels of information as to the desirability of the paper which it has tentatively purchased. The important sources of information open to the bank are (*a*) other bankers, if possible avoiding those with whom the borrower has an account, and (*b*) financial reporting agencies which specialize in the names of concerns which borrow on the open market. Obviously, while the borrower's banker may give very significant information, it may be much to his interest to represent the affairs of the company in a favorable light, even when conditions are strained, in order to protect the line of credit which has been extended. It has frequently happened in times of financial stress that a banker has wished to transfer his risk by encouraging his customer to borrow on the open market in order to pay off part of his bank loans or in order to

CONFIDENTIAL CREDIT INFORMATION

FROM

BOND & GOODWIN

OFFICES

BOSTON NEW YORK PHILADELPHIA CHICAGO MINNEAPOLIS LOS ANGELES SAN FRANCISCO PORTLAND, ORE. SEATTLE

__________STOVE COMPANY

INC. UNDER MASS. LAWS MARCH 26, 1914

MANUFACTURERS OF STOVES AND HEATERS ________, MASS.

A + A1 − HAa

BALANCE SHEET—December 31, 1919

ASSETS			LIABILITIES		
Cash	$164,633 64		Accounts Payable	$ 45,172 04	
Accounts Receivable—Less Reserves	414,415 94		Notes Payable	340,000 00	
Notes Receivable	7,165 73		Reserve for Dividends	15,750.00	
Liberty Bonds	41,000.00		Reserve for Salesmen's Commissions	755.17	$ 401,677.21
Inventories	312,989 05				
Cash Surrender Value—Life Insurance Policies	12,114 12	$ 952,318 48	Capital Stock—Common	315,000.00	
			Capital Stock—Preferred	304,000 00	
			Surplus	319,550 56	
Stocks and Other Securities	29,396 67				938,550 56
Plant—Less Reserve	297,054.94				
Wood Lots	43,000 00				
Deferred Charges	13,457 68				
Patent Rights and Goodwill	5,000 00				
		387,909 29			$1,340,227.77
		$1,340,227 77			

We have examined the accounts of the________Stove Company for the year ending December 31, 1919, and hereby certify that, subject to the qualification that no provision has been made for Federal Taxes on 1919 earnings, the above Balance Sheet sets forth substantially the financial condition of the company on December 31, 1919.

(Signed) BOYDEN & STEACIE, INC.

Bank Accounts

First National Bank, Boston
Merchants National Bank, Boston
Chase National Bank, New York City
National City Bank, New York City
First National Bank, Mass.
Mechanics National Bank, Worcester, Mass.

Officers

________ President
________ Vice-President
________ Treasurer
________ Clerk and Assistant Treasurer

Details re December 31, 1919, Statement, as advised us:

Accounts Receivable:
All due for merchandise sales except about 3 per cent which represents miscellaneous accounts.

Notes Receivable:
Of this amount, $252.50 is due from employees and is considered good and collectable. None of these notes are due from officers or directors.

Inventory—Raw:
Values at cost or market whichever was lower.

Finished:
Very conservatively taken from cost records.

Liberty Bonds:
These bonds as shown in the Statement are taken at cost.

Stocks and Other Securities:
In this amount are War Savings Stamps having a maturity value of $2,000.

Cash Surrender Value of Life Insurance Policies:
These policies either have been assigned to the Company or have been made out in its name.

Plant—less Reserves:
The Company's property includes completely equipped brick and concrete buildings having an aggregate floor space of about 106,000 sq. ft. and is ideally located adjacent to the Boston & Maine Railroad. Ample depreciation charges have been made each year. The amount so set aside for 1919 is approximately $50,000.

Notes Payable:
These represent notes then outstanding through Bond & Goodwin, payable at the Chase National Bank, New York City.

Accounts Payable:
This item, which includes $1,000 Special Trust Fund, represents amounts due for merchandise, accrued payroll, unclaimed wages, etc.

Contingent Liabilities:
The directors have voted an extra annual compensation to two officers of the Company amounting to $500 each, plus any accrued interest: In the event of the death of either of these officers, $5,000 is to be given to the estate of each.

Paper: Straight.

Operating Details:

Sales	$1,608,808
Net Earnings	177,816
Dividends	53,943
Contingent Liabilities	10,000

History and Business:
Company is a Massachusetts Corporation conducting a business originally established in 1875 by the ______ family who still retain a controlling interest.

The most important and best known products of the Company are the ______ Oil Cook Stoves and Heaters. The trade mark ______ is widely known throughout the country and is the oldest name connected with oil stoves. The company's products have been extensively advertised in the leading National publications such as "The Saturday Evening Post," "The Ladies Home Journal," "Pictorial Review," "Good Housekeeping" and others. The Company maintains a selling organization which covers the entire country and through which its goods are sold in every State in the Union.

Information given herein is obtained from official or other sources we consider reliable and as such has our confidence but for which we do not assume responsibility.

FORM 12. Confidential Credit Information Accompanying an Offer of Commercial Paper

supply himself with funds without resorting to the bank. Under the circumstances, therefore, more impartial information will probably be secured from the outside bank, to which special letters should be sent asking for the information desired. The following is a typical letter used for such purposes:

> "We are seeking close information on the .... Company, and if this name is known to you we will value your opinion upon the desirability of purchasing their notes.
>
> "We are also inquiring of the depository banks, but any information which you can give us from facts which you may have at hand concerning their standing, their affairs and prospects will be held in confidence and much appreciated.
>
> "Welcoming an opportunity of reciprocating your courtesy, we are,
>
> Very truly yours,
> THE .... NATIONAL BANK,
> Per X Y Z, Asst. Cashier."

Valuable and more detailed information is secured through those agencies which specialize in the investigation of bank loans. Such agencies usually sell their service to subscribers at a definite scale, depending upon the number of reports asked for during the year. In making a report upon a commercial paper "name" they correspond with banks and particularly with trade creditors. They also frequently send representatives direct to the company whose credit is being investigated as well as to others who are in a position to pass upon the concern. The results of their investigation are reported in considerable detail to the subscribing bank which makes the inquiries. Once a report has been prepared, however, it is multigraphed, and for a period of six months or even a year thereafter the same report would probably be used in answering further inquiries regarding the particular concern. A form showing the type of inquiries made "in the trade" by a leading credit reporting agency is inserted herewith (Form 13).

RISKS RUN BY THE NOTE BROKERS

Obviously, if the borrower's paper should be refused by the bank on account of some weakness which has been discovered,

NEW YORK
132 NASSAU STREET

BOSTON
220 DEVONSHIRE STREET

CHICAGO
100 SO. LA SALLE STREET

THE ELLIS FINANCIAL REPORTING SYSTEM, INC.

INVESTIGATING BANK LOANS AND WHOLESALE CREDITS ONLY

ESTABLISHED 1889

CONTROLLING:
BANKERS AND MANUFACTURERS MERCANTILE AGENCY
LEATHER TRADE SPECIAL REPORTING COMPANY

NEW YORK CREDIT MEN'S ASSOCIATION
We are Members
NATIONAL ASSOCIATION OF CREDIT MEN.

Credit Authority No. 22957

Please give in **Strict Confidence** your experience in doing business with

__________ of __________

Length of time you have sold them __________

On what terms __________

Highest amount of credit __________

Amount now owing you __________

Is the same due __________ or past due __________

If payments are slow, is the account in dispute or litigation __________

Do they anticipate ______ Do they discount ______ Pay promptly ______ Are they slow ______

Do they give notes for merchandise ______ If so, is discount lost thereby? ______

Do they give acceptances for merchandise ______ If so, is discount lost thereby? ______

Are they unreasonable customers __________

How do you regard the personnel of the concern __________

General Remarks __________

N. B. In exchange for extending the above courtesy we shall be glad to give you on application the result of our investigation.

For CONFIDENTIAL REASONS we have arranged a numeral which obviates the necessity of your signature hereto.

Respectfully yours,

THE ELLIS FINANCIAL REPORTING SYSTEM, Inc.

By __________

Credit Authority No. 22957

Name __________

Place of Business __________

Concern Investigated

Name __________

Place of Business __________

Date Sent __________

FORM 13. Credit Investigation Form Used by a Leading Financial Reporting Agency

rumors might be started which would plunge the borrower into really serious difficulties or might even lead to insolvency. Under such circumstances, the broker's position is a most precarious one. Having, normally, bought the paper outright, if a company should become seriously involved before the loan is sold, the broker would be in the position of a wholly unsecured creditor, since not even a deposit is required from the borrower. At the time of the severe failure of the Ingersoll Watch Company this very situation developed, the note brokers having several hundred thousand dollars turned back on their hands.

It sometimes happens that the "option" privilege has been abused. Some banks make use of it only for the purpose of securing a few days' interest on balances which would otherwise be idle. This practise, however, is exceptional, and in the great majority of instances the highest ethics are maintained throughout the transaction. If the banker desires to purchase the paper, he will normally hold it until maturity, though in recent years there has been some rediscounting at the Federal Reserve Banks. At the due date the note will be sent to the bank at which payable or perhaps put through as an ordinary collection item, the borrower in the meantime having deposited sums to meet the note. It is evident, therefore, that the transaction is a very impersonal one so far as the purchaser of the note is concerned, and there will normally be no renewal at maturity as so frequently happens in the case of the usual bank loans.

The borrower who can pass the scrutiny of the note broker and the various purchasers of his notes, as well as of the credit agencies, must ordinarily be in a well nigh impregnable position. As a rule, only the stronger concerns can satisfy the conditions imposed. The losses on this kind of borrowing, therefore, may ordinarily be expected to be merely nominal. Some years ago one important banking house reported an aggregate loss of less than one-tenth of one per cent on all open market notes over a period of 20 years. Another bank which had purchased more than $70,000,000 worth of paper, re-

ported an actual loss of less than $2,500. In 1920, out of 4,395 concerns offering their paper in the open market, the notes of only 31 were withdrawn after being offered, for credit reasons. About half of these came through without any difficulty, while the losses sustained on the remaining issues, were comparatively insignificant. During 1921, 46 out of 3,676 companies selling paper on the open market had more or less serious credit difficulties. One of the largest commercial paper houses in the United States further reported that between January 1, 1920, and July 1, 1921, there were 3,675 concerns with a capital in excess of $250,000 which sold paper in the open market. Of these, 89, or 2.4 per cent, were subject to some difficulties, but it is estimated that at least 60 per cent of this small number paid their notes in full. In 1928 only 2 companies with about $300,000 paper got into financial difficulties.

THE OPEN MARKET AND THE BORROWER—ADVANTAGES

Having examined in a general way the processes of open market borrowing, it will be of interest to note briefly some of the advantages or disadvantages of borrowing in this manner, so far as the business itself is concerned. Among some of the alleged advantages the following may be cited:

1. It is claimed that the borrower can in this manner obtain a lower interest rate than is offered by his bank. Very frequently the open market rates are lower than bank rates, due to the possibility of distributing the loan throughout a wider territory. It is an open question, however, whether lower rates are actually secured year in and year out, since there are times when the open market rates are higher than bank rates, and the bank in times of stress frequently impose a higher rate on the customer who has been using the open market than on the one who confines his loans solely to the bank. It must also be remembered that the commission of one-fourth of one per cent appreciably increases the open market rate.

2. It is sometimes maintained that the "open market" system tends to equalize interest rates throughout the country because of the wide geographic distribution of loans. In this

manner the paper of an eastern manufacturer may be bought by a western bank. The flow of temporary capital to the most urgent user thereof is thus facilitated.

3. Again it is sometimes fallaciously asserted that the borrower is appreciably the gainer because it is no longer necessary for him to maintain on deposit with his bank 20 per cent of his line of credit or average borrowings. Some borrowers have foolishly followed such a policy, with the result that, when the real need arose, they found that the banks were under no obligations to extend credit, and could be persuaded to do so only under the most onerous terms. No reputable note broker should permit his client to cut under the deposit requirements imposed by the bank.

4. Evidently, by using the open market the borrower can save his bank lines for emergency purposes, when his needs are normally greatest or when the market will not readily absorb his paper. Certainly, if the open market is being resorted to, bank lines should be kept open. It is wholly unsafe to burn the candle of credit at both ends at the same time. Properly thought of, however, the note broker may be regarded as the supplier of funds needed at the *peak* of the borrowing period. The open market should not be looked upon as a steady source of funds.

5. One of the most significant arguments in favor of open market borrowing is the fact that many banks are not sufficiently large to take care of the entire needs of their customers. Under such circumstances it may be highly desirable from the point of view of all concerned to sell paper at certain times in the open market. It is a question, however, whether, even though this is done, it might not be wiser to arrange bank lines sufficient to meet all needs at the peak, even though they are not necessarily utilized.

6. Some have argued that resort to the commercial paper house makes the business independent of the bank to such an extent that competition will lower bank rates and induce the banker to give better service. Perhaps the cautious use of this form of borrowing may result in certain advantages of the

sort mentioned. However, it should be remembered that only *preferred* risks can sell their paper at a favorable rate on the open market. Such borrowers are also "preferred risks" of their bank, and hence normally secure the most favorable rates, even without resorting to the brokers.

7. Again, it has been argued that the business concern by selling its paper on the market is trained to think in broader terms since it has an opportunity to benefit by the wider contacts which the open market brings. Though there may be some truth in this assertion such gains are questionable.

8. The use of the open market has been defended on the grounds that it brings helpful "advertising" to the company which can thus sell its paper. Some say that the very fact that a loan can be raised in this way is proof of the soundness of the concern. Further, the business will thus become more generally known and consequently more avenues for business and credit will constantly develop. There is, however, distinctly another side to this argument which will be presented in a moment.

DISADVANTAGES OF OPEN MARKET BORROWING

For practically every gain pointed out there is a counterbalancing disadvantage which must be faced by the one who borrows through commercial paper houses. Some of these disadvantages have been mentioned. A few additional drawbacks may perhaps here be indicated.

1. Disaster may result to the extent that a borrower through the use of the open market becomes independent of his bankers. By resorting continuously to the open market he may be deprived of that close and intimate counsel which the bank usually gives. Over-expansion of business may readily result, particularly if the "name" has once become well and favorably known. There is a tendency to continually purchase the paper of a well-rated concern, even when its financial policies are changing for the worse. The *sole* use of the open market may thus in the long run prove a disadvantage from the point of view of the business itself.

2. That company which borrows heavily on the open market to the neglect of proper banking connections is almost certain to encounter financial difficulties in times of panic and uncertainty. It is said that the Ingersoll Watch Company during the post-war period did a very large part of its borrowing on the open market. When deflation came rapidly, therefore, and rumors made credit uncertain, banks could not be depended upon to renew maturing loans. Insolvency was the result. Similarly, the Goodyear Tire and Rubber Company, though borrowing very heavily through brokers, under the old management, had established no large bank lines. This policy mattered little while prices were rapidly rising and the outlook was favorable. When the storm came, however, there were no strong, friendly banks to advise and to help during the emergency. The results are too well known to need further comment. In this connection, also, may profitably be recalled the discussion regarding the Ford Motor Company early in 1921 when it was supposed that it would be necessary for the company to borrow a large amount of money. As the practise had been to borrow whatever sums were needed through the open market and as friendly relations with banks had not been maintained, the banking community was at the time particularly hostile. It should be stated, therefore, that the open market not only affords no port in the storm, but rather aggravates the difficulties of the improvident borrower who during fair weather rows too far from shore.

3. Some borrowers in using the open market deceive themselves as well as their brokers with respect to their condition, even when no dishonesty is intended. Unless very specific questions are asked by the broker—and until recently many brokers were far too lax in this matter—a borrower may say his bank lines are open, when as a matter of fact he is not abiding by the requirements laid down by the bank or is not even familiar with those requirements. Once having established a "line of credit" he too frequently assumes that it is "open," even though in the meantime he has not used it and has not advised with his banker. No harm can be greater than that which results from a failure to comply with the deposit

requirements of a bank, and to maintain the conservative outlook which the commercial banker usually advocates. Some of the poorer types of brokers, eager for commissions, occasionally manage to sell the paper of companies, which because of the type of their business and management should never borrow away from home. The mere fact that they are selling paper on the market is sometimes interpreted by uninformed country banks to mean that their position is secure when as a matter of fact it is seriously endangered.

4. Many strong concerns feel that the sort of "advertising" which accompanies borrowing in the open market is by no means desirable. The inquiries regarding such a company are constant and innumerable. Much disagreeable publicity usually results even though no unfounded rumors are started. It is really surprising to know how deeply credit reporting agencies sometimes probe into the minutest details of a company's affairs and even make mountains out of molehills. Unless the highest ethical standards are followed, there are few borrowers against whom some ill-feeling might be held who could not be seriously injured as a result of the open market investigations. The president of one of the large New York banks stated some years ago that he was very proud of the fact when some of his customers could borrow on the open market. If they were able to pass the scrutiny, he argued that the judgment of the bank's officers was confirmed, and that their credit rating was thereby improved. On the other hand, many large and highly successful business concerns reason, perhaps rightly, that they are in danger of injuring their credit if they resort to the open market. Wholly unwarranted rumors may be put into circulation which may almost instantly mar what was otherwise an enviable record.

5. It is finally important to note that commercial paper has in recent years been heavily purchased by little banks. These country banks frequently act very much like sheep. When a concern engaged in one line of industry becomes financially involved, they frequently turn against the paper of every business of a similar sort. Sometimes the prejudice is even carried so far that when a well-known company in a given city fails or

is reported to be in serious difficulties, the paper of wholly different concerns located in the same place will be boycotted! Evidently, therefore, there are a number of disagreeable, not to say dangerous, factors connected with the use of the open market by business houses.

THE OPEN MARKET AND THE BANKER—ADVANTAGES

Inasmuch as open market operations are, in the last analysis, made possible only because bankers themselves will buy commercial paper, it is of some interest to review briefly the advantages or disadvantages accruing to the bank through the development of the commercial paper market. Chief among the advantages claimed are such as the following:

1. The banker by buying brokers' paper can invest funds which would otherwise be temporarily idle, or can at all events secure a higher interest on balances thus invested than he could by depositing these balances with some other bank. At the same time the bank's risk would doubtless be less. Funds invested in this way constitute a second line of reserves which is almost equivalent to cash.

2. By the judicious purchase of commercial paper, a bank's loans can be made much more liquid for a number of reasons. (*a*) In the first place the risk can be more evenly distributed, both geographically and industrially. (*b*) Maturities can be arranged wholly to suit the banker's convenience. (*c*) Also the bank is under no obligation whatever to renew the loans at maturity, as is frequently the practise in the case of the country banks[1] which finance merely local houses.

For these reasons, therefore, it is much easier for the bank to make certain that its loans are being used solely for work-

[1] "Country bank" is used here, as elsewhere, merely in accordance with the National Bank Act classification which designates as "country banks" those not located in central reserve cities or reserve cities. There are only three "central reserve cities," New York, Chicago and Saint Louis while there are 64 "reserve cities." All of the national banks in these cities are referred to as reserve banks while all others are known as country banks. On July 30, 1921, the total loans and discounts of banks in the reserve cities amounted to $6,519,-524,000 as opposed to total loans and discounts of $5,484,991,000 in all the "country" banks. It will thus be seen that 54.3 per cent of the loans and discounts were granted by the larger city banks.

ing capital purposes if it has an opportunity to buy commercial paper.

3. From the point of view of the bank's investment policy it has been argued that there is no safer or more satisfactory investment than commercial paper. It can be bought with convenient maturities and in even denominations. Bonds are subject to great fluctuation in value, even when thoroughly secured. Hence, there may be a loss in principal when a bank wishes to dispose of them. However, in those very times when bonds would be selling at a low figure, the rates realized on commercial paper are highest, and the principal is to all intents and purposes absolutely sure. There is no loss as a result of selling on the market. There have been periods when probably from 10 to 15 per cent of the loans of commercial banks were in the form of "purchased paper." Some banks and trust companies normally carried a much higher proportion. Even savings banks are in some states permitted to invest in commercial paper, provided certain definite conditions are complied with.[1]

[1] The following affidavit by the broker is required by the California law in order to make commercial paper legal for purchase by savings banks in that state:

(Place) (Date)

A statement of our condition duly ascertained and certified to by a certified public accountant, issued within the 12 months previous to the above date is enclosed herewith and shows:

(*a*) Capital and Surplus.
(*b*) Quick Assets.
(*c*) Slow Assets.
(*d*) Permanent or Fixed Assets.
(*e*) Current Liabilities and Accounts.
(*f*) Short term Loans.
(*g*) Long term Loans.

In addition to the above, we hereby make the following statements:

1. Nature of Business.
2. Contingent Liabilities such as endorsements or guaranties.
3. Mortgage debts.
4. Lien on current assets.
5. Liabilities during 12 months previous to audit.
   Maximum Minimum
6. Purpose for which paper was issued (i. e., for industrial or commercial purposes).
7. Purpose for which proceeds are used.
   (*a*) Permanent or fixed investments.
   (*b*) Investments of speculative character, either in goods or otherwise.
   (*c*) Trading in stocks, bonds or other investment securities.

4. It is sometimes maintained that through the purchase of commercial paper a bank may in time gain new and profitable accounts. This scarcely seems a valid argument. Even less true is the assertion made by one well-known writer that a small country bank may "grow strong and great" through the purchase of commercial paper when there is not sufficient business in the locality to employ all of its funds. The bank which buys commercial paper must *pay* for it outright, whereas when a *loan* is made *credit* is extended, against which a reserve of less than 20 per cent need be held, and in the aggregate only a portion of the loans extended are fully used at one time. A commercial bank, therefore, to the extent that it invests its resources in commercial paper, would be securing only a nominal or savings bank rate of interest. How anyone could expect a bank to *grow* which had no other outlet for its funds is a mystery which the writer is unable to solve.

5. Some bankers are apparently glad to have the open market used as an adjunct to bank borrowing by those customers whose needs are at certain times too great to be carried by the bank. Under such circumstances, however, the well-managed bank is particularly insistent that the stipulated percentage of the line of credit be maintained. No bank expects the open market to be used merely for the purpose of securing "cheap money" when business conditions are favorable.

DISADVANTAGES FROM THE BANKER'S POINT OF VIEW

Other advantages are sometimes suggested. The foregoing, however, would seem to be of most importance. Among dis-

8. Personal Assets under pledge or hypothecation.
9. Contingent Liabilities arising from rediscount of bills receivable. Accommodation endorsement.

(Signed).....................................

By.....................................

We hereby certify the foregoing is a full, true and exact copy of statement of .... on file in our office.

(Signed) F. S. MOSELEY & COMPANY.

By.............................

advantages which it is frequently alleged are experienced by the banker as the result of the development of the note brokerage system are the following:

1. Competition of note brokers, it is alleged, has frequently beaten down the banker's interest rates to an unprofitably low point. The banker prefers to lend at a fairly even rate throughout the year. On the other hand, as the paper market is more or less uncertain and volatile, the commercial paper rates fluctuate within rather wide limits and thus have an influence on bank rates. At all events the banker will tend in self-defense to charge higher rates to his customers when paper is not selling readily on the market. He will also be forced to do so at such times because of the increased demand upon his reserves.

2. It cannot be denied that many borrowers, until recently at any rate, have failed to understand the nature of their obligations to their banker when selling paper on the open market. They have not kept their lines properly open, and the note brokers have in prosperous times tacitly encouraged them in this practise. The banker is, therefore, confronted with a very disagreeable task when his customer meets with difficulties and can no longer market his paper. It then becomes a serious problem to know how the borrower should be treated by the bank whose requirements he has not met.

3. The open market rates are naturally lowest at the time when money is most plentiful and when the bank rates themselves are lowest. The borrower tends to patronize the open market in order to profit by a lower rate. To the extent that the loan can in this manner be widely distributed to distant banks with idle funds, there may be a distinct economic gain. When, however, as sometimes happens, banks find it necessary to buy through the open market paper of their own customers in order to find employment for their money, there is certainly no economic justification for the use of the open market. Under such circumstances there is a distinct economic loss, resulting from the wasted effort in placing the paper for which the broker receives his one-fourth per cent commission.

GENERAL OBSERVATIONS

The experiences of the last four or five years, and particularly of the last two years, have done much to educate bankers and business men as well as brokers to a new point of view regarding open market borrowings. During the period of very rapid expansion many of the large banks in the cities bought no paper whatever, finding that their resources were needed in order to take care of the expanding business of their usual customers. The interior banks were the chief purchasers of commercial paper during this period. The rates realized were usually very attractive, and much higher than could be obtained through an investment in high-grade securities. Further, there was practically no risk of loss in principal.

This state of affairs was very pleasant while general business conditions were favorable, but as soon as the bubble of inflation was pricked, the market for paper fell with great rapidity. Within little more than a year there was about a 50 per cent decrease in the amount of commercial paper outstanding. It was then realized that expansion made possible by open market borrowing is of very doubtful value. The banks already had their hands full, so that when the market broke many borrowers were reduced to the point where there was no alternative between insolvency and the issuing of long time obligations at a bitterly high rate of interest. It is probable that in the future these concerns may not view with so high a degree of complacency the possibilities of open market borrowing.

The brokers have also learned, some of them with much chagrin, that their responsibility to the public as well as their personal risks are very real. Formerly a good deal of paper was sold without giving out much information regarding the borrower. Frequently the broker himself secured very inadequate information from the borrower. Some brokers who, three or four years ago, were demanding no statement from certain customers, are now requiring the filing of carefully audited statements, and are checking up their borrowers at least semi-annually and sometimes quarterly or even more frequently. It

has been found that paper can no longer be sold unless all the cards are put on the table.

It is doubtful whether the commercial paper market has in a number of important respects conferred the benefits which have sometimes been attributed to it. The long run point of view in such matters must be taken. It is, further, important to bear in mind that the inauguration of the Federal Reserve System has made possible an interchange of credit through the banks themselves in such a manner that the open market may not so frequently need to be resorted to. Not only can a bank now increase its reserves by rediscounting its customers' promissory notes with the Federal Reserve bank of the district, thus securing Federal Reserve notes, but there has also been developing the more extended use of "two name" paper in the form of acceptances, which may in a measure displace open market borrowing. This movement has in the main been vigorously opposed by the commercial paper houses. Some attention will be given to the problem of *acceptances* in the following chapter.

Although the above point of view was first expressed nearly seven years ago, the trend of events has been exactly as then forecasted. The amount of commercial paper outstanding has grown rather continuously less until borrowing by this method is now (early in 1929) not much more than one-fourth as great as at the peak in 1920. Bankers' acceptances and straight commercial borrowing from the banks seem to be filling the place formerly held by commercial paper. Also, the leading corporations have gradually built up such large cash reserves that they are now lending very substantial quantities of money to brokers for speculative purposes (the so-called "bootlegger" loans). Banks, likewise, are lending their surplus funds on the call loan market at high interest rates, instead of buying either commercial paper or bankers' acceptances.

CHAPTER XVII

TRADE ACCEPTANCES AND BANK ACCEPTANCES

A. Trade acceptances—Form and use of the trade acceptance—The open account system—The case for the trade acceptance—Does it increase working capital?—Arguments against the trade acceptance—Extent of use of the trade acceptance—Trade acceptance experience—General observations on the trade acceptance—B. Banker's acceptances—Typical transaction involving the use of a bank acceptance—Theory and practise of the bank acceptance—Abuses of the bank acceptance.

A. Trade Acceptances

"THE honorable gentleman has said many things which are true, and many things which are new. Unfortunately, however, the things which are true are not new, and the things which are new are not true." Such were the words of a famous English statesman as he arose to reply in the British Parliament to the speech of a no less famous colleague.

The problem of the trade acceptance may well be approached at the present time in the same critical spirit, not because the trade acceptance itself should be criticized, but because of the misrepresentations and exaggerations of its sponsors. Were it not for the fact that the proponents of the trade acceptance have advocated its use as an important improvement in our financial methods, and had its use not been strongly urged by the Federal Reserve Board, there would seem to be little reason for discussing the subject in this connection. Since, however, for weal or woe, the trade acceptance has been made primarily a financial issue, the problem of its use will be briefly reviewed at this point.

The trade acceptance was little discussed and practically unknown in this country, by name, at the time of the passage

of the Federal Reserve Act in 1913. However, the intensive study of European methods carried on after the outbreak of the War resulted in a good deal of attention being given to this so-called "credit" instrument. Beginning about 1916, a propagandist campaign was launched under the aegis of the Federal Reserve Board for the purpose of popularizing the use of trade acceptances. This propaganda increased in volume and intensity after the United States entered the War, and was continued with vigor until early in 1920 when the wave of prosperity began to break. In the meantime the claims made in behalf of the trade acceptance were comprehensive and startlingly exaggerated. Its use was actually urged by many in high positions on patriotic grounds. The trade acceptance was advocated as a means of conserving credit, or increasing credit, which would make it easier for business concerns to finance themselves while "helping to win the War." European experience with the trade acceptance was pointed to as a reason for its adoption by merchants in this country, though the fact was utterly ignored that conditions surrounding its use in Europe were far different from those which obtain in this country. Whether its use was so vigorously urged because of the importance of the trade acceptance in the business transactions of our allies, or because it was important for us to learn efficiency through a study of the methods of our enemies, is an open question!

Opinions, assertions, predictions, prophecies, hopes, arguments from analogy, were for several years scattered *ad nauseam* in an effort to force the adoption of the trade acceptance. Those who were thoroughly "converted" to its desirability carried on most active "missionary" work, and certainly could not be accused of any lack of religious zeal! Little business fellows of uncertain reputation secured for themselves much publicity by advocating the use of the trade acceptance or adopting it in their own business. Thereupon they became veritable "heralds of light," whose words of endorsement were referred to almost as oracles. Whenever a prominent man, though thoroughly unfamiliar with the economic questions involved in the use of the trade acceptance, gave the movement his en-

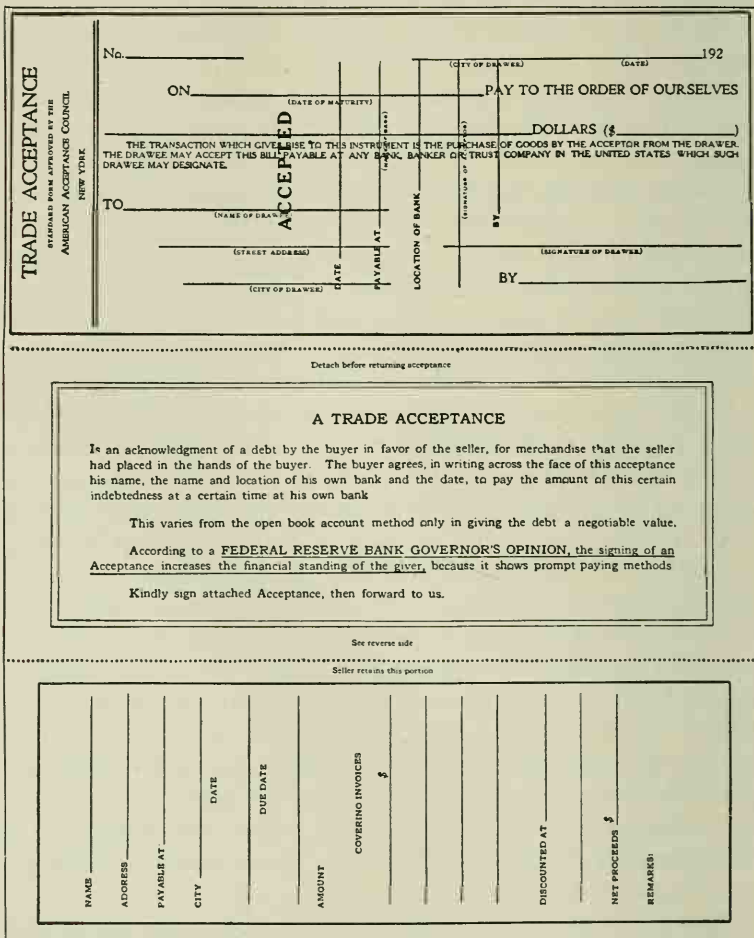
dorsement, the "converts" assumed that the public should agree absolutely with all of his statements no matter how little supported by actual facts. The business man was asked to adopt the trade acceptance *on faith,* inasmuch as a number of leaders had "seen the vision."

FORM AND USE OF THE TRADE ACCEPTANCE

Before proceeding further with the discussion it should be explained that a trade acceptance is simply a *draft or bill of exchange drawn by the seller on the purchaser of goods sold, and unconditionally accepted in writing upon its face by the latter.* In accordance with the standard form which has been generally adopted, the acceptance will have printed on its face a statement to the effect that the obligation of the acceptor arises out of the purchase of goods from the drawer. The acceptance may ordinarily be made payable by the acceptor or purchaser of the goods at any bank or trust company in the United States which he may designate, or it may be made payable at his own place of business. Ordinarily, however, for the sake of convenience in collection, the accepted draft will be made payable at the customer's own bank. This instrument, having been sent by the seller of the goods to his customer and accepted by the latter, is then returned, and may either be held until maturity by the drawer, or may be discounted at his bank or sold on the open market. Trade acceptances discounted by a bank which is a member of the Federal Reserve System may be rediscounted with the Federal Reserve bank of the district, provided the time elapsing before maturity is not more than 90 days. No limit is placed upon the amount of trade acceptances which may be discounted by a national bank for any one customer. In order to encourage the use of the trade acceptance the Federal Reserve Board formerly established an artificially low rediscount rate for this form of paper, the rate being at least one-half of one per cent lower than that prevailing for rediscounted promissory notes.

It should further be explained that the trade acceptance differs from the "draft" ordinarily used in mercantile trans-

actions, in that the latter is usually drawn upon a slow pay customer whose account is past due, while the trade acceptance is presented for the customer's signature at the time when goods are sold to him. It differs from notes receivable in that the latter are "single name" paper instead of "two name" paper, and are given either to take up a past due account or because the terms of sale are very long and it is the custom of the particu-



TRADE ACCEPTANCE
STANDARD FORM APPROVED BY THE AMERICAN ACCEPTANCE COUNCIL NEW YORK

No.________ ________ (CITY OF DRAWER) ________ (DATE) 192

ON ________ (DATE OF MATURITY) PAY TO THE ORDER OF OURSELVES

________ DOLLARS ($________)

THE TRANSACTION WHICH GIVES RISE TO THIS INSTRUMENT IS THE PURCHASE OF GOODS BY THE ACCEPTOR FROM THE DRAWER. THE DRAWEE MAY ACCEPT THIS BILL PAYABLE AT ANY BANK, BANKER OR TRUST COMPANY IN THE UNITED STATES WHICH SUCH DRAWEE MAY DESIGNATE.

TO ________ (NAME OF DRAWEE)

________ (STREET ADDRESS)

________ (CITY OF DRAWEE)

ACCEPTED — DATE — PAYABLE AT — LOCATION OF BANK — (SIGNATURE OF DRAWEE) — BY

________ (SIGNATURE OF DRAWER)

BY ________

Detach before returning acceptance

A TRADE ACCEPTANCE

Is an acknowledgment of a debt by the buyer in favor of the seller, for merchandise that the seller had placed in the hands of the buyer. The buyer agrees, in writing across the face of this acceptance his name, the name and location of his own bank and the date, to pay the amount of this certain indebtedness at a certain time at his own bank

This varies from the open book account method only in giving the debt a negotiable value.

According to a FEDERAL RESERVE BANK GOVERNOR'S OPINION, the signing of an Acceptance increases the financial standing of the giver, because it shows prompt paying methods

Kindly sign attached Acceptance, then forward to us.

See reverse side

Seller retains this portion

NAME — ADDRESS — PAYABLE AT — CITY — DATE — DUE DATE — AMOUNT — COVERING INVOICES $ — DISCOUNTED AT — NET PROCEEDS $ — REMARKS:

FORM 14. Approved Trade Acceptance Form

lar trade to do business on notes receivable rather than on open book account. Again, the trade acceptance differs from a "banker's acceptance," since the latter is a draft or bill of exchange which has been accepted by a *bank*, while the trade acceptance is accepted by a *merchant*. Also, the trade acceptance indicates that goods have actually been sold while the banker's acceptance is used for the purpose of extending credit to the business man while goods are being imported, exported, or are in process of production.

The trade acceptance is not a new instrument of credit. Canada, Germany, and France have for a long period made use of this device, and it was common in England until a generation ago when it began to be somewhat displaced by the use of bank checks and the "overdraft system."[1] In France, where the acceptance has probably had its highest development, very small bills are accepted and discounted, some denominations being as low as 5 francs, while the average value of bills discounted by the Bank of France in some of the pre-War years was not more than 600 or 700 francs. In this connection it should be remembered that the bank check system used in this country is practically unknown in France.

Domestic "bills of exchange" of the sort referred to were commonly used in this country before the Civil War period Chiefly because of the uncertainty regarding the trend of prices, there gradually developed the policy of doing a cash business. In order to encourage the sale of goods on a cash basis, prompt payment discounts were offered to customers which so far exceeded the normal interest rates that it would be decidedly to the buyer's advantage to pay cash. Thus the system of doing business in this country gradually changed from the old method of drafts, running sometimes for many months, to the present "open book account" method, in accordance with which many buyers pay their bills promptly in order to gain the discount, while an uncertain number let their accounts run and thus lose the cash discount.

[1] It is a frequent practise among English merchants to make arrangements with their banks to allow them to "overdraw" their accounts up to a certain more or less definite amount while temporary transactions are being financed. This practise is very much frowned upon in this country.

THE OPEN ACCOUNT SYSTEM

As a result of the use of the "open account" method of handling transactions there has developed a bewildering number of wholly different terms of sale and trade practises.[1] Every industry has its own customs, and frequently there are many differences even within the industry itself. In some instances very great inducements are offered for prompt payment by way of a large cash discount, and in other cases bills are normally permitted to run on open account for a considerable period of time. In the latter case it is sometimes the practise to take notes from the customer, though this is not so common as formerly. It has been estimated that at any one time there are several billion dollars of "accounts receivable" resulting from the customary method of doing business in this country. These accounts are unsecured, and, while normally regarded as very liquid, are really almost wholly dependent upon the business ethics of the purchaser. A small proportion of the accounts are never paid, while in a large percentage of transactions the actual terms of sale are not complied with. Obviously, therefore, the open account method of handling mercantile transactions is open to serious indictment. Specifically, the chief criticisms of the *status quo* are the following:

1. When the open account is used payment is uncertain, as many accounts become overdue. It is estimated that probably at least 30 per cent of all *time* transactions are not met at the stipulated maturity.

2. Even when the 30- or 60-day option is not exercised, and purchases are made for "cash" (frequently after 10 days) the cash discount is taken even though the time limit has been exceeded.[2] This taking of the unearned "cash discount" is a

[1] Those not already familiar with the situation should refer to Chapter XXIII, pages 680-685 for a brief discussion of terms of sale.

[2] Very common terms of sale are 2 per cent—10 days, 30 or 60 days net. This is frequently written "2/10, 30 net," for example, and means that 2 per cent will be deducted from the face of the bill for cash payment within 10 days, while if this method of settlement is not chosen the account becomes due and payable at its face value at the end of 30 days from time of dating.

source of much dissatisfaction to the seller of goods and leads to unintended discrimination between customers.

3. When the open account is used there is more likelihood of goods being returned by the buyer, or of having excessive claims made for damages, and the like. It is sometimes maintained that the "cancelation" of orders and reshipment of goods immediately after they are received are evils developing out of the open account method.

4. With open book accounts the seller is frequently, in practise, made to finance the buyer by carrying his accounts whether or not it is convenient or agreeable to the seller of the goods. This imposes upon the business man a function which really belongs to the banker.

5. It is commonly stated that the open book account leads to overbuying on the part of the purchaser, a practise which frequently results in financial disaster.

6. In general, critics assert that the use of the open book account lowers the standard of business ethics and leads to a lack of order and system on the part of the seller as well as of the buyer of goods. The method is described as wasteful, expensive, and productive of higher prices to all.

Though such weaknesses as the foregoing are sufficiently evident in our present selling methods, many maintain that the difficulties arise from the *misuse* of the system and are not attributable to the system itself. On the contrary it is urged that the open account is conducive to the development of the highest possible business standards, inasmuch as its maintenance depends solely upon the integrity of business men. It is unnecessary at this point to discuss the situation further, though more detailed mention will be made of some phases of the problem in another connection.[1]

THE CASE FOR THE TRADE ACCEPTANCE

Realizing that there are certain outstanding weaknesses in the open account practise, the proponents of the trade accep-

[1] See Chapter XXIII.

tance have at times almost unqualifiedly asserted that these evils can be cured by the converting of accounts receivable into trade acceptances. The most sweeping claims and assertions have been made by leaders of the movement, nor, in picturing the gains to be derived from the change, have they stopped with the immediate issue. Frequently it has been claimed that practically all business and financial ills could be cured by the general use of trade acceptances. If the acceptance has proved useful for one type of industry, or if there is good reason for thinking it would be useful, there has been a tendency to claim that similar gains would result from its introduction in wholly different lines of activity. Arguments and counter arguments have been brought forward by the score and by the hundred. Most of these arguments, however, upon analysis will be found to be either fallacious or wholly irrelevant. Agonizing attempts have been made to show why particular classes in the business community will be benefited by the use of the trade acceptance. It seems scarcely necessary, however, to "earmark" the specific advantages or disadvantages in this way. Whatever real gain accrues to the seller of goods will also be a gain to the buyer and the ultimate consumer as long as reasonable freedom of competition is maintained.

Having examined the question with considerable care, the writer concludes that there are really very few fundamental arguments on either side of the case. In fact, most of the alleged claims might be reduced under one or two general heads. However, the following arguments favoring the use of the trade acceptance may be briefly examined:

1. The use of the trade acceptance will increase working capital, "liquefy credit," make possible the carrying on of a much greater volume of business with the same amount of capital, and so forth.

2. It is easier for the business man to borrow by discounting trade acceptances at a low rate of interest than to pledge his open accounts. In the former case, also, he can usually borrow practically up to 100 per cent of the value of the acceptance,

while in the latter, even on the best accounts, he cannot borrow more than 75 per cent or 80 per cent.

3. The trade acceptance will lead to prompter payment, and will prevent the general abuses of the terms of sale by the purchaser.

4. Losses from bad accounts will be reduced as a result of the use of the trade acceptance.

5. The general application of the trade acceptance will make it possible to plan business operations more definitely, particularly from the financial point of view, on account of the *certainty* of payments at a stated time.

6. By the use of the trade acceptance the purchaser will be "educated" in many desirable ways. He will be discouraged from overbuying, will be prevented from taking unearned discounts, will not find it possible to return goods and quibble over their quality, and in general will be forced more carefully to plan his affairs.

It can readily be seen that the first five arguments mentioned can really be reduced to the first, namely: *that the use of the trade acceptance will in some way increase working capital or make possible a more effective application of capital already invested in a business.* These arguments all apply primarily to the seller of goods, while the last argument relates to the purchaser. Since, however, all purchasers are also sellers, it is scarcely necessary to give special attention to the case of the "buyer," except to say, in passing, that he is ordinarily far less eager to sign acceptances than the seller is to receive them from him. Let us, therefore, examine the one big argument which has been most stressed by the proponents of the trade acceptance.

Back of practically every claim which has been made for the trade acceptance is the thought that by some alchemy its use will increase capital and facilitate borrowing. The adherents of the trade acceptance have strangely overlooked the fact that it is, after all, essentially merely a different method of *handling* sales, and *not a method of financing sales.* It has been alleged that the favorable rediscount rates established by

the Federal Reserve Board for trade acceptances represent a distinct boon to the business man, though it is difficult to see exactly how or why such special rates will be passed on to him, particularly if he does not even discount the trade acceptances which he holds. It has further been stated that since the law imposes no limit on the amount of trade acceptances which a national bank may discount for one of its customers, there is furnished by means of this device an almost unlimited possibility for securing additional credit.

In fact, if one were to believe all the arguments that have been written and spoken on the subject, he would be thoroughly convinced that it is possible for the entire business world to raise itself by means of its own bootstraps. The assertion has sometimes been made that by the use of the trade acceptance a concern could do four or five times as much business on the same amount of capital, and the *usual* assertion has been that *twice* as much business could be done by the use of the trade acceptance.

It should be borne in mind, however, that the trade acceptance connotes not a *cash* business, but a *credit* business. The acceptance is not advocated for terms shorter than one month, and because of the Federal Reserve Act's 90-day maximum provision, the upper limit rather than the lower is frequently thought of. At the present time the usual trade terms rarely exceed 60 days, while 30 is a more common period, provided the cash discounts are not taken. Beyond a doubt, the larger number of purchasers, in volume of purchases, even under the open account system borrow from the banks and pay cash. The advocates of the trade acceptance, however, say that under the new plan the borrower, instead of "contracting a loan," would be in a position to "sell an asset."

The following statement by one of the leaders in the trade acceptance movement may be taken as typical of the exaggerated claims made, and will serve as the basis of our brief discussion:

"If trade acceptances were substituted for open accounts, thus enabling the merchant to discount them at his bank, there-

by providing additional capital, the strain would unquestionably be relieved, and the merchant would be in a position to do *twice the amount of business* possible under the open book method."

In order to expose the fallacy contained in the above assertion, let us assume the following simple balance sheet covering only the current assets and current liabilities of a company:

A. Current Assets		Current Liabilities	
Cash	$ 120,000	Accounts payable	$ 300,000
Accounts receivable	320,000		
Inventory	560,000		
Total	$1,000,000	Total	$ 300,000

The proportions existing between the various current asset items are those normally found in the "average" manufacturing concern throughout the country, and can be taken as typical of a real situation. Let us now assume that the concern whose current condition is as above indicated becomes converted to the gospel of the trade acceptance. Without indicating the intervening steps, we may suppose that $320,000 of the receivables are now divided equally between "accounts receivable" and "trade acceptances receivable." This assumption is made because it is highly probable that at least 50 per cent of the accounts will be on a cash basis—no doubt in most instances not more than 25 per cent of the accounts could possibly be put on a trade acceptance basis.

Let us now assume that our business wishes to borrow as much money as possible in order to finance its current needs. Assuming that the current assets are properly valued and that the general condition is satisfactory, what alternatives are open? Obviously, if the company is engaged in a well-known line of industry and is well seasoned, it can probably borrow from the banks until the current ratio will approach the customary "two to one." Apparently, therefore, $400,000 might be borrowed from the banker direct or through commercial paper houses. This money would normally be used for either one or both of two purposes, to pay off accounts receivable or

to purchase further inventory, and perhaps incidentally to strengthen the cash position. Assuming, for the sake of simplicity, that the entire amount of money borrowed would be used for purchasing goods, our balance sheet would be changed as follows:

B. Current Assets		Current Liabilities	
Cash	$ 120,000	Accounts payable	$ 300,000
Accounts receivable	160,000	Notes payable	400,000
Trade acceptances	160,000		
Inventory	960,000		
Total	$1,400,000	Total	$ 700,000

If instead of using the entire loan to purchase inventory, all of the accounts payable had been liquidated, the balance being used for increasing the merchandise account, different values would result which it is not necessary here to indicate.

Let us assume, however, that our business man literally believes that the trade acceptance will enable him to do twice as much business on the same amount of capital. What steps are open to him? For the sake of simplicity we may for the moment ignore the assumed bank loan, and examine the statement as originally given. Let us give the would-be borrower the benefit of every doubt, and suppose that he can discount the entire amount of his trade acceptances receivable, that is, $160,000. Again, for the sake of simplicity, we may apply the proceeds to inventory. The balance sheet will now appear as follows:

C. Current Assets		Current Liabilities	
Cash	$ 120,000	Accounts payable	$ 300,000
Accounts receivable	160,000	Trade acceptances discounted (*contingent liability*)	160,000
Trade acceptances (discounted)	160,000		
Inventory	720,000		
Total	$1,160,000	Total	$ 460,000

To continue our assumptions, let us suppose now that our borrower, thoroughly imbued with the mistaken doctrines

which have been taught regarding the potency of the trade acceptance as a capital raiser, sallies forth like a Don Quixote to tilt with his banker on the strength of his statement as first presented (A). He asks for a loan of $400,000 to which he would originally have been clearly entitled. No doubt, in his innocence, he has forgotten to include on the liability side of his balance sheet the *contingent liability* resulting from his discount of $160,000 worth of trade acceptances. Accordingly, he might expect that instead of a mere $400,000 he might be able to raise even $500,000, or more. He might, in his simplicity, present a statement which would appear as follows:

D. Current Assets		Current Liabilities	
Cash	$ 120,000	Accounts payable	$ 300,000
Accounts receivable	160,000		
Trade acceptances receivable	160,000		
Inventory	720,000		
Total	$1,160,000	Total	$ 300,000

This statement would look very good indeed, and the current ratio would still be two to one if the banker would lend as much as $550,000! Under such circumstances the borrower would have realized through his discount of trade acceptances and through a bank loan, a total of more than $700,000 or almost twice as much as in the original assumption. This statement, however, is a flagrant misrepresentation. The banker will immediately revise it in accordance with the transactions as set forth above, whereupon the contingent liability of $160,000 becomes evident. How much, then, could the business borrow on this statement? Obviously, all that the bank could lend in order to maintain the two to one ratio between current assets and current liabilities would be *only $240,000.* If this loan were made, the statement would then appear as follows, assuming again that the loan is put into inventory, and the borrower would have raised *not one cent* more working capital than if he had confined his borrowing solely to his bank in the usual manner:

E. Current Assets		Current Liabilities	
Cash	$ 120,000	Accounts payable	$ 300,000
Accounts receivable	160,000	Trade acceptances discounted (*contingent liability*)	160,000
Trade acceptances	160,000	Notes payable (to bank)	240,000
Inventory	960,000		
Total	$1,400,000	Total	$ 700,000

It is unnecessary to burden the reader further with analyses of this sort. No matter how the proceeds of the loan may be spent, the result is always the same. A given asset cannot do duty in double capacity. No amount of propaganda will make $200 of current assets "grow" where only $100 "grew" before. If the borrower discounts his trade acceptances, he thereby reduces by so much his current ratio and decreases the basis of current assets on which the banker customarily loans. To be sure, our borrower might have made his loan at the bank first, whereupon he might temporarily discount his trade acceptances with some other bank or with a discount company. This procedure, however, would speedily be discovered by his bank, which would at the next lending period proportionately cut down the line of credit. The contingent liability set up by the borrower who pledges his receivables may become at any time a very real liability, as has been demonstrated to the sorrow of hundreds of thriving business concerns during the past two or three years. Did the banker disregard this fact, it would be easy for the sellers of goods to fill their current assets with very slow and practically worthless trade acceptances with a view to inflating their sales. Inevitably, however, the "joy ride" would soon be over, and the borrower would find that he could not, under any *camouflage*, safely borrow twice on the same assets.

What, then, is the conclusion of this particular argument? *The discounting of trade acceptances merely serves to cut down a borrower's bank lines by a proportionate amount.* Any other interpretation of the matter is based on ignorance of accounting procedure and conservative financial practise. Of course,

it is true that if a concern's collections have been made more prompt by the use of the trade acceptance or if its type of customer has been generally improved thereby, a bank may be disposed to strain a point and lend a little more liberally than would be the case if only open accounts were used. But it must be remembered that only a minor proportion of the accounts receivable can be changed to the trade acceptance basis, even under the most favorable conditions—and these would normally be the long time accounts, since the others would presumably be taking the cash discounts or abiding closely by the terms of sale! Unless, therefore, the terms of sale themselves are shortened by the use of the acceptance, the banker would probably not feel particularly enthusiastic about extending a more liberal line of credit, and *if* the terms *were shortened,* he might have extended a little more credit just as readily without this rather slight use of trade acceptances.

ARGUMENTS AGAINST THE TRADE ACCEPTANCE

So much for the *supposed* case in favor of the trade acceptance. Much of the opposition to the use of the trade acceptance has been based on prejudice, ignorance or personal interest. Many of the arguments have really ignored the main points at issue. A few of the opposing arguments which appear to be valid are here mentioned.

1. The use of acceptances may tend to make the usual terms of payment longer, since their adoption will naturally put customers on a time basis who might otherwise have paid more promptly in order to secure the cash discount offered. Further, the very fact that extensions of time are frequently granted in order to induce the buyer to give acceptances, leads to the extension of terms. All of this will mean a heavier investment in receivables and a less satisfactory credit situation, since trade will be tending farther away from a cash basis.

2. The use of trade acceptances may lead to a dangerous pyramiding of credit. The same units of goods passing rapidly through successive stages of production may serve as the basis for repeated acceptance credits, all of which may be drawn for

the maximum time. If the trade acceptances so used are immediately discounted, a serious inflation of credit may result as the same goods will have actually served as the basis of several independent credit transactions. The goods may have passed out of the hands of the purchaser long before the acceptance which he has given becomes due. If all acceptances were held by the drawers and not discounted, this criticism, of course, would not be valid. However, the proponents of the trade acceptance have based their main arguments upon the discount or rediscount possibilities of this instrument!

3. It is sometimes urged that there would be a good deal of expense connected with the handling of trade acceptances in the case of those concerns in which the average bill of goods sold is small. There is probably some truth in this contention, though general experience is scarcely sufficient to warrant definite conclusions. This argument, like many others, is more concerned with the *routine* of trade acceptance operations than with the underlying principles.

4. Obviously, the trade acceptance is not needed in the case of those customers who pay cash or always abide by the terms of sale. Evidently, therefore, its greatest field for usefulness is among those customers whose credit rating is second and third grade—those who fail to observe the terms of payment strictly and those whose credit is rather doubtful. If, by use of the trade acceptance, these customers can be made more prompt, some good might have been achieved. In such cases, however, the use of the trade acceptance would be *remedial.* The acceptance would be applied as a medicine in order to cure a disease. To employ the trade acceptance in this manner, however, weakens the case for it. Customers who are slow and whose credit is poor may make a great deal of trouble for the seller no matter which method is followed. The acceptances given by *poor* customers will be *poor* acceptances. Even the strenuous advocates of the trade acceptance maintain that they wish to have it used, not on the poor accounts, but on the *best* accounts. This point is made clear by the following statement:

> "The principal mission of the trade acceptance is to liquify credit, improve the turnover, and minimize credit losses. To

maintain its place as a high-grade credit instrument it will, therefore, be used with the *best class* of current accounts.

"Where goods have previously been sold on an open account basis, and the credit department record of the customer shows that his account is usually settled with due regard for the credit terms, the acceptance is used to the best advantage."

Such a statement is hard to understand. Why use the trade acceptance with customers whose credit is of the best? They do not need it. Nor will the use of acceptances in this connection improve the credit rating of the seller of goods. Obviously, the function of the trade acceptance should be to go out and find the ninety-nine sheep that have gone astray, rather than to put another rope around the one obedient sheep which stayed at home. The protagonists of the trade acceptance are hard put to it, indeed, when, in order to maintain the reputation of their particular instrument they must advocate its use merely in those instances in which it is most useless and unnecessary!

5. Finally, it is urged that the trade acceptance has been subject to so many abuses that business men should oppose it. Many of the abuses were unexpected by the advocates of the trade acceptance. Some of these are the following:

(*a*) Acceptances have sometimes been given to take up overdue accounts. (*b*) Frequently acceptances have been renewed at maturity. (*c*) Many inducements have been offered to buyers in order to persuade them to accept drafts drawn on them. These inducements have frequently taken the form of an extension of time to the purchaser combined with the retention of the cash discount feature. Countless evils have resulted in this manner, and it is difficult to see that anyone, except possibly the buyer, for a brief time, has gained by the transaction. (*d*) There has sometimes been a lack of investigation on the part of banks when trade acceptances have been discounted. Because of the fact that two names were on the paper, it has sometimes been thought safer. This assumption has frequently proved a serious mistake. If the acceptor's credit is poor, the only security is the strength of the drawer.

His credit, in turn, is not a whit increased because he holds the accepted paper of a merchant whose word is not good.

It is needless to mention other arguments advanced against the introduction of trade acceptance practise. The more important have been noted. It is thoroughly unwarranted to condemn the trade acceptance itself because it has recently been subject to numerous abuses. The open account privilege likewise has been from time to time greatly abused. No system of financing the sale of goods which can be devised will be able to eliminate the weaknesses which arise because of certain well-known characteristics in human nature.

Of course, there has been a good deal of opposition to the trade acceptance in certain quarters based, no doubt, on immediate self-interest. The commercial paper houses, for example, have as a rule been bitterly opposed to its adoption, arguing, first, that a borrower who pledges his receivables will immediately weaken his credit position since he is attempting to borrow twice on the same assets. In the second place, the note broker has, no doubt, feared that a concern which uses trade acceptances may discount them when in need of additional funds rather than sell paper on the open market. Such a practise would tend to destroy the business of the commercial paper house. Whatever their theory, however, a number of well-known note brokers are now "peddling" trade acceptances on the open market. They have probably decided that if the trade acceptance is to be used, they might as well acknowledge the fact and prepare to meet the enemy on his own ground.

It is scarcely probable, however, that the use of the trade acceptance will ever be sufficiently extensive to displace single name paper on the open market, in spite of the fact that commercial paper houses have slightly felt the competition of this new form of "two name" paper. The larger and stronger companies, if they do secure acceptances from their customers, will not discount them, and will, therefore, continue to resort to the open market, provided it has been their custom to do so. The smaller borrowers, who are most likely to discount acceptances, are not on the open market anyway. The trade acceptance may at times prove very useful to the small bor-

rower whose local bank cannot lend him all the money which he needs on a straight promissory note because of the 10 per cent legal restriction, but which may be very glad to discount his trade acceptances. Finally, acceptances are not so convenient in denomination as commercial paper.

EXTENT OF USE OF TRADE ACCEPTANCES

It is impossible to give any full statistics regarding the present use of trade acceptances. In 1916, when the movement was first launched, there were only 185 known users, while by the end of 1920 it was claimed that the list exceeded 20,000. These users of the trade acceptance are found in all sections of the country and in practically all lines of industry, among which may be mentioned the following:

"Advertising, Agricultural, Automobiles, Bicycles, Brass Goods, Bronze Goods, Builders' Supplies, Canners, Cement, Carpets and Rugs, Clothing Manufacturers, Coal, Confectionery, Cooking Utensils, Cotton, Drugs and Chemicals, Dry Goods and Notions, Electrical Goods, Exporters and Importers, Flour and Feed, Food Products, Furniture and Fixtures, General Merchandise, Glass, Grocers, Hardware, Jewelry, Leather Goods, Lumber, Machinery, Office Equipment, Optical Goods, Packers and Shippers, Paint (Varnish), Petroleum Products, Publishers, Rubber Goods, Shoes, Silverware, Sporting Goods, Tobacco, Vehicles (Wheels), Woolens (Yarns)."

Most of those concerns which secure trade acceptances from their customers do not discount them. It is impossible, therefore, to know how great a volume of business is carried on by means of acceptances. Ordinarily, when the term acceptance has been used in financial circles, it has applied only to *banker's* acceptances. This fact has led to a good deal of misapprehension as to the actual volume of acceptances outstanding. At the end of April, 1922, the Federal Reserve banks held only $5,552,000 in trade acceptances, of which amount $5,445,000 was discounted for member banks and $107,000 purchased on the open market. A year earlier the total amount held was nearly three times as great. At the same period (1922) the banks held $90,688,000 of banker's acceptances, of which prac-

tically all had been purchased in the open market. The total volume of trade acceptances discounted by Federal Reserve banks during the maximum year, 1920, was $192,157,000, while for the same period $187,162,000 in banker's acceptances were discounted. During this same year the total acceptances purchased in the open market amounted to $3,218,364,000, of which practically the entire amount was in *banker's acceptances*. In 1921 the figure had declined to only $1,534,401,000.

Evidently there has been during the post-war years a great shrinkage in the volume of trade acceptances finding their way to the open market. This is due both to the improved business conditions and to the fact that not so much interest is taken in the acceptance as formerly. While the "seller's market" continued, it was comparatively easy to induce customers to accept. During the present "buyer's market," however, the customer does pretty much as he pleases. Obviously, unless the seller has a monopoly, he cannot force the customer to accept. He must either give special inducements or offer an alternative. Inducements are rather dangerous at the present time, and when the alternative between signing an acceptance or following the usual terms is given, the acceptance customarily finds its way into the waste-basket.

TRADE ACCEPTANCE EXPERIENCE

Many a business man who eagerly supported the trade acceptance before the market broke, has by the stress of circumstances been forced to modify his earlier viewpoint. From the letters of two well-known leaders in industry who have been most active in spreading the gospel of the trade acceptance, excerpts are quoted. The first letter covers the experience of a company whose sales sometimes amount to more than $200,000,000 annually.

> "During the years 1920 and 1921 our comparison of losses on trade acceptances to those on open accounts did not show up so well (as in 1918 and 1919). You probably realize, as well as we do, that during these periods (especially the latter part of 1920 and the early part of 1921) orders were pyramiding, which meant that many customers were unable to pay

their obligation when the demand fell off, and therefore considerable losses resulted. Consequently our percentage of loss was higher than in previous years.

"The trade acceptance has been abused, and the principal abuses are as follows:

1. Renewing trade acceptances.
2. Taking trade acceptances on overdue accounts.
3. Giving too long time.

"This company has had few instances where the first and second abuses have applied. However, there have been some instances where customers have been given too long time, and the customer has obtained more credit than he was entitled to."

The foregoing company sells finished goods to dealers throughout the United States. The following letter is received from the president of a large company which sells basic raw material to important customers.

"At the time we introduced the trade acceptance we had a seller's market. We were able to tell the buyer what he had to do. Since September, 1920, it has been a buyer's market, and the buyer has been able to tell us what we had to do. But we had introduced the trade acceptance quite generally prior to that time, and there has been enough impetus to carry this thing over in a measurable degree.

"To be perfectly frank, however, the trade acceptance is not yet on anything like a proper basis. The main resistance to it comes from the great corporations such as, for example, the Steel corporation, who have their system of accounts, who pay their bills with religious regularity on a fixed day, and who cannot be moved by any argument to change. The largest and best established business institutions in the country are not open to any new truth in the matter of accounting. No possible exception can be taken to their method in that they agree to pay on the fifteenth, twentieth, or thirtieth of the month as the case may be, and they pay exactly on the date named. But they will not issue acceptances. The acceptances are given mainly by the smaller customers, or by some of the larger concerns who desire a little longer time than the customary 30 days.

"We are still preaching the gospel of the trade acceptance, we are pushing the thing as hard as we can, but it has not been easy going."

One might well ask the writer of the last letter what possible gain could arise from pushing the trade acceptance with customers who religiously meet all their obligations! It is also obvious that practically none of the figures purporting to show the results of trade acceptance practise are worthy of any credence whatever. The experience has not been sufficiently long under similar circumstances, under corresponding business conditions, and with the same class of customers, to enable any definite conclusions to be drawn.

GENERAL OBSERVATIONS ON THE TRADE ACCEPTANCE

The much debated question of the trade acceptance may perhaps best be concluded by indicating a few of the important considerations which should be borne in mind in passing judgment upon the utility or expediency of this form of credit instrument.

1. The trade acceptance cannot be profitably used in those types of business where the prevailing terms of sale are *cash*.

2. There does not appear to be any real gain resulting from the use of trade acceptances for the *better* accounts receivable.

3. The slow pay and uncertain customers may be "educated" by the use of the trade acceptance, and their accounts receivable may be made more liquid so that there will be some improvement of the credit position of the selling concern. However, no hasty conclusions should be drawn in this matter, since the mere use of the trade acceptance will not necessarily make a good account out of a poor account. On the contrary, some purchasers of goods have merely signed acceptances with a view to prolonging the credit terms, while in the meantime they have overstocked themselves with inventory, for which, at the maturity of the acceptances, they were unable to make payment.

4. The seller of goods cannot avoid the numerous risks or escape the liabilities of his position merely because his customer signs trade acceptances. If the credit of the customers is poor, the acceptances received from them may be worth little more

than his "accounts receivable" on the open account system. Also, if trade acceptances are discounted the seller's liability becomes a very real one.

5. Theoretically the trade acceptance might be most conveniently used by those concerns whose customers are relatively few and in which the individual sales are large. Under such circumstances, however, either the acceptance is not needed because of the high quality of the accounts, or the customers, being large and powerful, will refuse to sign trade acceptances.

6. Experience has shown that the seller of goods is much more eager to receive acceptances from his customers than to give them to those concerns from which he, in turn, purchases goods. Frequently it is difficult to see exactly what the buyer would gain by signing an acceptance. At any rate, if given an alternative, he does not appear to be eager to experiment with these "vicarious" benefits.

7. If the trade acceptance is to be properly used it should stand upon its own merits. Special inducements, concessions, renewals, extensions and the like, should be tabooed. It is clearly an unwarranted practise to grant specially favorable rediscount rates to this type of paper as was until recently done by the Federal Reserve Board. The benefit of such rates is not ordinarily passed on to the customer by the member banks, nor is there any justification in practise for the establishment of a rediscount rate lower than would naturally result through the competition of various types of loans in a free money market.

8. The trade acceptance should not properly be thought of as a credit instrument, but rather as a *means,* under certain circumstances, *of improving trade relations and strengthening the accounts receivable.* Its function is to arrange particular terms of sale between the selling house and its customer—*not to serve as a means of securing more bank credit.*

9. If trade acceptances are received from customers, the best use to which they can be put is for the seller to hold them in his safe until maturity, at which time they will be put through as collection items.

10. It is extremely doubtful whether the trade acceptance can, in the long run, compete with single name paper, even though it should be used as a vehicle for borrowing. It is far more convenient to borrow on the security of the current position, signing promissory notes for round sums, than to raise working capital by discounting a miscellaneous batch of varying denominations of trade acceptances. Since it is unsafe and generally impossible to borrow twice on the same current assets, it is scarcely probable that discounted trade acceptances will displace loans made through commercial paper houses, inasmuch as the latter are more convenient and readily distributed throughout the country.

11. In those exceptional cases in which the borrower's own bank is not large enough to lend up to his full requirements, and when the business is too small to sell paper on the open market and does not wish to open accounts at other banks, there may be some advantage in using trade acceptances. However, it would probably be most unwise for the original bank, already loaning to the limit, to run the risks incurred by extending further credit to a borrower by means of the rediscount of trade acceptances. Nor would it be a wise policy for the borrower himself to follow.

12. Whenever trade acceptances are discounted, practically as much care should be exercised by the banker as when a loan is made on single name paper. The credit of the acceptor cannot be taken for granted. His financial position must be carefully scrutinized. If his credit is not satisfactory, the only security that the bank actually has is the credit of the seller of the goods. It is evident, therefore, that a good deal of additional routine will be imposed upon the bank which discounts trade acceptances and that in numerous instances credit would probably be refused.

13. In general it may be said that the use of the trade acceptance does not in any essential respect increase the working capital of the seller or enable him to do more business with the same amount of capital. All that the trade acceptance can hope to do is, perhaps, to bring about a somewhat greater de-

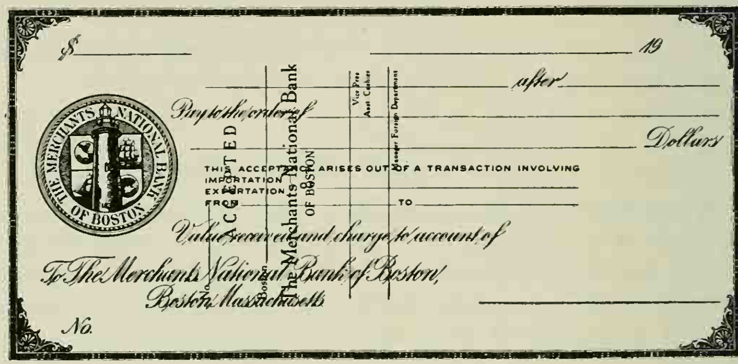
gree of standardization in selling practise and procedure. It may also, in certain cases, induce a stricter observance of already existing terms. If the use of the trade acceptance should in any way lengthen the terms of sale or reduce the proportion of cash payments, it would work a serious economic evil because of the attendant inflation of credit. Probably, in the long run, little more can be accomplished through the use of the trade acceptance than could be achieved if the same amount of energy were expended by the seller in handling his accounts under the open book method. No method of handling sales transactions can be stronger than human nature—and human nature does not readily change. However, some of the earlier abuses have probably been corrected.

B. Banker's Acceptances

While the "banker's acceptance" was practically unknown *by name* in this country until after the passage of the Federal Reserve Act and the outbreak of the European War, there is nothing at all new about this much discussed instrument of current financing. It is essentially nothing but a "bill of exchange" accepted by a bank. Such instruments can readily be traced back four thousand years to ancient Babylonia, and their use has been common in European countries for centuries, particularly in the London money market. However, our National Bank Act, passed during the Civil War period, specifically forbade national banks to accept bills of exchange drawn on them, so that there was no legal encouragement to the development of the practise in this country. Further, there was little need for the use of such instruments in the United States until the outbreak of the War, because practically all foreign trade operations, for which banker's acceptances are primarily used, were carried on through London, which was the center of international banking. The situation, however, has been entirely changed as a result of the inauguration of the Federal Reserve System in the United States and of the readjustments in commerce and finance brought by the World War.

A bank acceptance may be defined as *a bill of exchange or draft payable at a fixed or determinable future date, upon the*

face of which has been acknowledged in writing the unconditional obligation of the bank on which it is drawn to pay the same at maturity. The bank acceptance differs from the trade acceptance in that it does not represent an actual loan or an accomplished transfer of goods. It merely indicates that the bank, for a financial consideration, has extended its credit to the party who arranges with the bank to accept drafts drawn on it up to a stipulated amount and covering certain designated transactions.



$ 19

after

Pay to the order of

Dollars

ACCEPTED

The Merchants National Bank OF BOSTON

Vice Pres

Asst Cashier

Manager Foreign Department

THIS ACCEPTANCE ARISES OUT OF A TRANSACTION INVOLVING

IMPORTATION

EXPORTATION

FROM TO

Value received and charge to account of

To The Merchants National Bank of Boston,

Boston, Massachusetts

No.

THE MERCHANTS NATIONAL BANK OF BOSTON

FORM 15. Typical Bank Acceptance Used in Foreign Trade Operations

The only types of bank acceptances which are of interest in this connection are those which arise (*a*) through the importation or exportation of goods; (*b*) through the domestic shipment of goods; and (*c*) through the storage of readily marketable staples. Inasmuch as most bank acceptances in this country are used in order to finance the importation and exportation of goods, a very cursory mention will be made of a typical export transaction together with the documents involved, specimens of which are inserted herewith.

TYPICAL TRANSACTION INVOLVING THE USE OF A BANK ACCEPTANCE

Let us suppose that a Baltimore merchant wishes to import a cargo of hides from Buenos Aires. It is probable that the Argentine exporter does not know the importer well enough

to wish to accept his personal check in payment for the goods ordered. At any rate it will be much more convenient for him to have in his possession an instrument of payment which is readily and instantly negotiable because of the credit of the banking house involved. It would be a common practise, therefore, for the importer to arrange with his bank, or through his own bank with a correspondent bank at the point of importation, to extend a line of credit sufficient to cover the anticipated transaction. An agreement would, therefore, be entered into between the importer and the bank, in accordance with which the banker, for a specific consideration, usually one-fourth to three-eighths of one per cent, on the face of the credit, for every 90-day period, would agree to permit the exporter to draw a draft covering the shipment of the goods, and to accept the said draft upon presentation accompanied by the proper documents. The conditions of a typical acceptance agreement are set forth in Form 16.

It will next be necessary for the bank, by means of a commercial letter of credit, to advise the Argentine exporter or his designated bank that an acceptance credit, not exceeding a specified amount, and covering the anticipated transaction, has been duly opened by the importer. Having received this letter, the former can draw his draft, which he would normally sell accompanied by bill of lading, consular invoice, insurance policies and the like, to his own banker, who would discount the draft at the current rate of interest for such bills. In due course the draft, accompanied by the various documents, will be sent to the bank which authorized the acceptance whereupon it will be "accepted" by the bank.

In the meantime the shipment of hides has probably arrived, and the importer will wish to secure his goods. The title, however, is in the hands of the accepting bank, and in order to secure possession, the importer must either pay the face of the draft or give the bank acceptable collateral as a guaranty of payment at maturity. If his credit is sufficiently good, the bank may permit him to take possession after signing a *trust receipt,* which permits him to put them through the various processes of production or sell them in trade *for the account of*

Foreign 32 1000-8-19

ACCEPTANCE AGREEMENT

(FOREIGN)

NO.________

TO THE MERCHANTS NATIONAL BANK OF BOSTON

We hand to you herewith, for acceptance, our draft(s) drawn on you at ______________ days sight, No. ________

dated ______________________________ to the order of

____

for $ ______________________ It is agreed that the proceeds of said draft(s) will be used to finance the importation or exportation of goods as per particulars below :—

PARTICULARS	AMOUNT	

In consideration of your acceptance of the said draft(s), the undersigned, jointly and severally, agree to pay you at the time of the acceptance a commission of ________ per cent., and further agree to pay you the amount of the said draft(s) at your office one day before the maturity thereof. We waive all liability on your part in case the goods are not according to contract, either in description, quality or quantity or in any other respect. All bills of lading, warehouse receipts and other documents of title and all moneys and goods held by you as security for any such acceptance shall also be held by you as security for any other liability from us to you whether then existing or thereafter contracted.

We further agree to give and furnish you on demand additional security or to make payment on account in amounts and character satisfactory to you. If we fail to comply with any such demand or in case of our insolvency, assignment, bankruptcy or failure in business, all our obligations and liabilities direct or indirect to you whether arising hereunder or otherwise shall forthwith become due and payable without demand or notice. All goods represented by bills of lading, warehouse receipts or other documents of title pledged with you as security for your acceptances hereunder, shall be at all times covered by us by certificates of insurance under open policies to your order or by specific policies payable to you as your interest may appear, to an amount sufficient to cover your advances or obligations hereunder, and you are to have specific claim and lien on such policies and their proceeds to the amount of your interest in the goods thereby insured.

Upon our failure to comply with any of the terms hereof or upon the non-payment by us of this or any other liability to you when due or at any time or times thereafter then in any such case all obligations and liabilities direct and contingent from us to you whether arising hereunder or otherwise shall at your election forthwith become due and payable without demand or notice and we hereby give to you full power and authority to sell, assign, transfer and deliver the whole or any part of the securities, bills of lading or documents of title or the goods represented thereby or of any security substituted therefor or added thereto at any broker's board or at public or private sale with or without notice or advertisement at your option and do further agree that you may become a purchaser at such sale if at any broker's board or at public auction and hold the property or security so purchased as your own property absolutely free from any claim of or in the right of ourselves. In case of any sale or other disposition of the whole or any part of the security or property aforesaid, you may apply the proceeds of such sale or disposition to the payment of all legal or other costs and expenses of collection, sale and delivery and of all expenses incurred in protecting the security or other property or the value thereof as hereinafter provided and may apply the residue of such proceeds to the payment of this or of any then existing liability of ours to you whether then payable or not, returning the overplus to us and in case of any deficiency we agree to pay to you the amount thereof forthwith with legal interest. You may also upon any such non-payment apply the balances of all our deposit accounts in the same way that you are authorized to apply the proceeds of any sale of the security or property hereunder.

You may pay taxes, charges, assessments, liens or insurance premiums upon the security or any part of it, or otherwise protect the value thereof or of the property represented thereby, and may charge against us all expenditures so incurred, but you shall be under no duty or liability with respect to the protection or collection of any security held hereunder or of any income thereon, nor with respect to the protection or preservation of any rights pertaining thereto beyond the safe custody of such security. We hereby agree that if, in your opinion, the market value of the security hereby or hereafter pledged to secure this obligation after deducting all charges against the same, is at any time less than the amount thereof and ________ per centum thereof added thereto, we will upon demand, deposit satisfactory additional security so that the market value of the security pledged hereunder, after deducting all charges, shall always equal the amount of this obligation plus such additional percentage.

We hereby agree to indemnify you against any liability or responsibility for the correctness, validity, or genuineness of any documents or any signatures or endorsements thereon representing goods which you hold, purchase or sell under this engagement, or for the description, quantity, quality or value of the property declared therein, or of any insurance certificates or policies, and against any general loss or charges or other expenses accruing with respect to such goods through delay in transmission of shipping documents or through any other cause, which charges and other expenses we agree to pay. We further agree that no delay on your part in exercising any right hereunder shall operate as a waiver of such right or of any right under this obligation.

All rights arising under this agreement shall be determined according to the laws of the Commonwealth of Massachusetts.

Dated ______________________ ______________________

____

FORM 16. Acceptance Agreement Used in Foreign Trade

Lee, Higginson & Company.

No. ____________ 44 State Street.

Boston, ______________ 19__

Messrs. ______________________________

____

Gentlemen,

We hereby authorize you or any parties whom you may direct by written order to draw on us at ____________ sight any sum or sums not exceeding in all $______________ say ______________________________ U.S. Dollars to be used for paying ______________________________ the invoice cost of Merchandise to be purchased for account of ______________________ of ______________ and to be shipped to ______________________________

The Bills authorized under this Credit must bear its number and date, and be drawn in ______________________ or some Port ______________ not later than ______________________ and advice thereof given to us in original and duplicate accompanied by Consular Invoice and full set Bills of Lading filled up to order of Lee, Higginson & Co. or "order" blank indorsed, with abstract of Invoice thereon of property embraced in said Bill of Lading which are to be delivered to us against acceptance.

We hereby engage ourselves towards you as the drawers and also the endorsers and bona fide holders of bills drawn in conformity with the terms of this credit to accept such drafts on presentation and pay the same at maturity. Insurance provided

Yours faithfully

U.S. Dollars $____________

FORM 17. Commercial Letter of Credit for Foreign Trade Purposes

TRUST RECEIPT

Received from THE MERCHANTS NATIONAL BANK OF BOSTON the following goods and merchandise, their property, specified in the Bill of Lading per

S. S. ____________________

Dated____________________marked and numbered as follows:

and, in consideration thereof, we hereby agree to hold said goods in trust for them, and as their property, with liberty to sell the same for their account, and further agree, in case of sale, to hand the proceeds to them to apply against the acceptances of THE MERCHANTS NATIONAL BANK OF BOSTON on our account, under the terms of the Letter of Credit No.______________issued for our account and for the payment of any other indebtedness of ours to THE MERCHANTS NATIONAL BANK OF BOSTON.

THE MERCHANTS NATIONAL BANK OF BOSTON may at any time cancel this trust and take possession of said goods, or of the proceeds of such of the same as may then have been sold, wherever the said goods or proceeds may then be found and in the event of any suspension, or failure, or assignment for the benefit of creditors, on our part, or of the non-fulfillment of any obligation, or of the non-payment at maturity of any acceptance made by us under said credit, or under any other credit issued by THE MERCHANTS NATIONAL BANK OF BOSTON on our account or of any indebtedness on our part to them, all obligations, acceptances, indebtedness and liabilities whatsoever shall thereupon (with or without notice) mature and become due and payable. The said goods while in our hands shall be insured against loss by fire at their full value, loss if any, payable to THE MERCHANTS NATIONAL BANK OF BOSTON, at the proper cost and expense of the undersigned who hereby agrees to pay all charges for storage of said merchandise or any and all other expenses incurred thereon.

Dated, Boston, Mass.,____________________19

(Signed)____________________

AMOUNT____________

DUE____________

FORM 18. Trust Receipt Used by Bank in Connection with Foreign Transaction

the acceptor bank. The various obligations thus incurred are set forth in the accompanying trust receipt.

Before the maturity of the acceptance, the importer will put the bank in funds by means of which the obligation will be liquidated. Usually the banker's commission is paid at the time of the acceptance of the draft. The length of time for which banker's acceptances are drawn will depend largely upon the nature of the transaction involved and the distance from which or to which goods are to be shipped. The soundest

practise would forbid the drawing of drafts the maturity of which would exceed the time when funds for liquidating the loan are normally secured through the sale of the goods in question. The period may vary from one month to a year, though the commoner terms are probably three months. Some maintain that the life of the acceptance should not exceed the actual time required for the shipment of goods to their destination. This would doubtless be the better policy to follow.

Export credits are handled in a similar fashion. In the case of domestic shipments, acceptances are usually drawn for a briefer period of time, the theory being that it is not the banker's function to furnish working capital for the general uses of the business, but merely to finance specific shipments of goods.

Occasionally acceptances may be made to finance the carrying of readily marketable staples in storage.[1] A banker's acceptance drawn for such a purpose, however, must at all times be secured by a *warehouse receipt*, and such "warehouse acceptances" should never be granted for the carrying of goods on speculative account. Every acceptance should carry on its face a statement clearly indicating the character of the underlying transaction.

THEORY AND PRACTISE OF THE BANK ACCEPTANCE

Whatever the nature of the particular transaction, it is evident that the bank in *theory* extends only its *credit* until such time as it is convenient for the purchaser of the goods to make payment. In practise, however, the accepted draft becomes very much like a cashier's check or a promissory note of the bank. The bank's liability, therefore, may be a very real one indeed, as has been demonstrated during the past two years of falling prices. Further, when transactions of this sort are carried through, particularly in foreign trade, the financial condition of the parties involved is not usually investigated, since

[1] A readily marketable staple has been defined by the Federal Reserve Board as "an article of commerce, agriculture or industry of such uses as to make it the subject of constant dealings in ready markets with such frequent quotations of prices as to make the price easily and definitely ascertainable and the staple itself easy to realize upon by selling at any time."

the banker himself, presumably, controls the commodity until the obligation incurred has been liquidated.

National banks are allowed to accept drafts as above indicated having not more than six months' sight to run, provided that in the case of domestic transactions shipping documents conveying or securing title are attached at the time of acceptance. Ordinarily it is unlawful for a bank which is a member of the Federal Reserve System to accept for any one person, company, firm or corporation to an amount exceeding more than 10 per cent of the bank's paid up and unimpaired capital stock and surplus. This limit, however, does not apply if the accepting bank remains fully secured at all times during the life of the acceptance. A "trust receipt" is not regarded as "actual" security. Under certain conditions a national bank may, in the aggregate, accept such bills to an amount equal to the paid up and unimpaired capital and surplus. The bank, having accepted the draft, may either hold it till maturity or sell it to other banks or discount companies. Occasionally banks may actually purchase or discount the drafts which they have previously accepted, though this is considered a very unsound policy because it may mean an unwarranted extension of loans to a single individual. There also appears to be no limit to the amount of discounted acceptances of other banks which may be purchased as an investment.

Bank acceptances are eligible for rediscount with a Federal Reserve bank, provided the maturity at the time of discount is not more than three months, including days of grace. The Federal Reserve banks may also rediscount bills drawn by member banks for the purpose of furnishing dollar exchange.

Until recently the Federal Reserve banks were not allowed to purchase on the open market any banker's acceptances with maturities in excess of three months. In May, 1921, however, a new regulation was made providing that acceptances with a six months' maturity might be purchased. The reasons for this action, as stated by the Federal Reserve Board, were (*a*) first, to widen the acceptance market by meeting the wants of savings banks and similar purchasers of banker's acceptances who wish longer maturities than three months; and (*b*) to provide

more ample facilities for financing import and export trade with countries in which either normal or present abnormal conditions indicate the desirability of extending longer credits. This action on the part of the Federal Reserve Board was a questionable attempt to stimulate foreign trade at a time when conditions were scarcely such as to warrant the running of further risks.

Most states have now empowered banks which are chartered under their laws to grant acceptance credits. Twenty-six states have made this provision through the passing of special statutes, while practically all of the remaining states have made indirect provisions for acceptance financing. Only one state (Kansas), even in the year 1922, held it illegal for a bank to accept drafts. Most banks in the United States at the present time, therefore, may, if they choose, extend their credit in this manner.

An open market is gradually developing for banker's acceptances, which are being used as a short time investment by many institutions other than banks. The distribution of acceptances is usually made through recently organized discount houses, finance corporations, or even through the old line commercial paper houses. Bank acceptances are frequently represented as being the most liquid and safe short time investment available. Daily and weekly lists of acceptance offerings are now being circulated, and an attempt is being made to split them into denominations which will be convenient for different types of investors. A survey recently made by the Federal Reserve Bank of New York indicates that, in addition to such investors as banks, insurance companies, and the like, the following types of purchasers were discovered:

> Salt, Iron and Petroleum Companies, Creameries, Telephone Companies, Hospitals, Cotton Mills, Publishing Houses, Lumber Mills, Elevator and Milling Companies, Athletic Clubs, Coke and Chemical Concerns, Butchers, Laundrymen, Boys' Clubs, Steel Companies, Sanitariums, Breweries, Mutual Benefit Associations, Guaranty Companies, Cotton Companies, Feed Stores, Colleges, Churches, Fraternal and Welfare Organizations, and the like, not to mention a large number of widely diversified industrial concerns.

Banker's acceptances increased rapidly in volume while post-war trade prosperity was at its height. Much encouragement was given by the Federal Reserve Board to the use of this instrument of finance, through artificially favorable discount rates. Many banking organizations were formed whose chief function was to further the financing of foreign trade.

After a few quiet years, the number of bankers' acceptances increased rapidly as other interest rates were advancing late in 1927 and throughout 1928, until $1,284,000,000 was outstanding at the end of 1928. Of this amount, $484,000,000 was held by the Federal Reserve Banks and $325,000,000 by foreign central banks with Federal Reserve Bank endorsements. Another $200,000,000 was probably held for account of foreign banks through their American correspondents. Only $48,000,000 was held by the originating member banks, as they could get a higher return on their money by lending on call to brokers. The balance of around $200,000,000 was scattered mostly between dealers, brokers, savings banks, corporations, and private investors. The Federal Reserve Banks are now trying to encourage the holding of acceptances by commercial banks, and are letting rates take their normal course.

On December 31, 1928, banker's acceptances outstanding arose from the following transactions in the amounts indicated:

Exports	$ 496,653,000	Warehouse credits	$ 173,590,000
Imports	315,614,000	Dollar exchange	39,153,000
Goods stored in, or shipped between, foreign countries	243,278,000	Domestic shipments	16,198,000
		Total	$1,284,486,000

ABUSES OF THE BANK ACCEPTANCE

Many abuses have arisen in connection with the use of banker's acceptances due, no doubt, to general misconception of their proper function. Specifically, the following may be referred to:

1. Domestic acceptances in particular have apparently at times been authorized with a view to lending to a customer more credit than he is legally and conservatively entitled to. In many cases acceptances have thus been issued in order to enable goods to be carried in warehouses in the hope that prices

would increase. Any such speculative or unnecessary use of the acceptance is to be strongly condemned.

2. Frequently, banker's acceptances have been renewed before maturity without any sufficient reason. It is unfortunate that this practise has been permitted, inasmuch as the purpose of a banker's acceptance is to lend credit for carrying on a brief and self-liquidating transaction. When renewals are granted there is danger that the bank will be furnishing permanent working capital, or even fixed capital, to the party in whose behalf the acceptance credit was arranged.

3. Again, acceptances have frequently been drawn for too long a period of time. There is no reason for extending the maturity of an acceptance beyond the time when the transaction giving rise to the acceptance has been consummated. When the life of a banker's acceptance extends for a long period after goods have been sold, the same commodities may, in turn, serve as the basis for trade acceptances which may be discounted. A dangerous pyramiding of credit may thereby result. When prices are dropping, bankers have found to their sorrow that the acceptance credit is anything but liquid or safe. Some of the largest New York bankers, in the space of a year lost millions of dollars as a result of the shrinkage in value of those commodities to finance the shipment of which acceptance credits had been granted.

4. Finally, it is probable that in the future, stricter terms will be observed in connection with the issue of acceptance credits. It is doubtful whether such credits should be available at all for domestic transactions or storage purposes. Under such circumstances it should be perfectly easy for a business whose credit is sound to borrow from its banks on promissory notes, and arrange, if necessary, for the use of sight drafts. There is really little need for the development of the banker's acceptance in facilitating domestic transactions, since there are already adequate channels for conducting such business. Originally, also, there was no provision in the Federal Reserve Act for authorizing banker's acceptances in transactions involving domestic shipment of goods and warehousing of staples. A further development along these lines is probably unnecessary.

CHAPTER XVIII

MISCELLANEOUS METHODS OF RAISING WORKING CAPITAL

Commodity loans and their importance—Loans secured by bills of lading—Warehouse loans—Other commodity loans—Pledging receivables—Financing automobile sales—Security loans—Dealer credit—The special problems of the small borrower—Installment sales.

MOST working capital loans are raised through the use of promissory notes in the manner indicated in a preceding chapter. Frequently the borrower may have a number of alternatives open to him which he can use in accordance with his own convenience. For example, the same concern might finance a particular transaction by borrowing from its bank or through its note brokers on single name paper. It might secure from its customers trade acceptances which would be discounted. Bank acceptance credit might be arranged. Sight or time drafts on the purchaser of goods might be used. Trade credit might be brought into play, or some kind of secured loan might be made. There are times, as has been indicated in an earlier discussion, when it may even be necessary to raise additional working capital by means of security issues ranging from common stock to first mortgage bonds. This aspect of the matter, however, is not of concern in the present connection.

Some concerns have open to them practically every method of temporary financing, while others, because of the nature of their operations, their size, their limitations of management, or for many other reasons, are more narrowly restricted so that they will customarily follow, perhaps, only one method of financing. The method used may also depend upon general business conditions or upon local banking developments and practises.

It may be generally stated, however, that whenever alternatives are open a well-managed company will finance it-

self in the manner which keeps its credit position strongest and at the same time affords the most favorable interest rates. Consistent with this policy, therefore, the average company will normally wish to borrow on straight, unendorsed promissory notes for its general current financing. There are occasions, however, when even a strong company finds it more desirable or convenient to finance specific transactions by other methods, while there are frequently weaker concerns which have open to them no alternative but secured loans or dealer's credit. Sometimes the secured loan is used in addition to ordinary bank borrowing in order to obtain larger loans than the strength of the current position might warrant without security.

For purposes of the present discussion, the various alternatives other than unsecured promissory notes and acceptance credits may be broadly classified as secured loans, dealer credits, and endorsed loans. *Secured loans,* to which attention will primarily be given, may, for convenience, be divided into loans which are secured by (*a*) commodities, (*b*) accounts receivable, and (*c*) stocks and bonds. Sometimes a fourth type of secured loan is spoken of and designated as a "mortgage" loan. However, it seems scarcely logical to set up as a separate classification working capital loans which are secured by chattel mortgages, since these mortgages are normally based on *commodities,* and hence may be regarded merely as a subclassification of commodity loans.

Commodity Loans

Every loan made by a commercial bank on single name paper is to a certain degree a "commodity loan," inasmuch as the borrower's inventory usually constitutes a large proportion of his current assets, and the nature of the goods in which he deals will influence the line of credit which the bank will extend to him. The commercial banker's loan, however, is unsecured and is dependent chiefly on the integrity and financial position of the borrower. On the other hand, there is an enormous amount of current financing based on the security of basic commodities which are in process of transfer from one owner

to another, or which are already in the borrower's possession. Probably several billions of dollars are annually borrowed for temporary purposes on the security of commodities, either in the raw state or in finished form. Such loans may be broadly grouped as *commodity loans.*

According to the annual report of the Comptroller of the Currency, 13.85 per cent of the loans of national banks at June 30, 1921, were secured, directly or indirectly, by commodities. The aggregate amount involved was $1,663,000,000. This was equal to almost 23 per cent of all unsecured loans, exclusive of acceptance credits. The proportion is now lower.

The Federal Reserve Board has defined *commodity paper* as "notes, drafts, bills of exchange, or trade acceptances accompanied and secured by shipping documents or by a warehouse, terminal or other similar receipt covering approved and readily marketable non-perishable staples properly insured." "Staples," according to the rulings, include manufactured goods as well as raw materials provided the goods are non-perishable and have a ready market. The "commodity paper" referred to in these regulations includes not only paper originating with the producer, but also that of merchants and others, when the commodity is not carried for speculative or purely investment purposes. Such paper when accompanied by the proper documents and when within the time limits, may be eligible for rediscount at the Federal Reserve banks. Special rulings have been made by the Federal Reserve Board in favor of commodity paper issued in connection with the movement of crops. Further, "agricultural paper," which is defined as "notes, drafts, bills of exchange or trade acceptances the proceeds of which have been used, or are to be used, for agricultural purposes including the breeding, raising, fattening or marketing of live stock," has been most favored of all under the Federal Reserve System, since it can be re-discounted provided it has a maturity at the time of discount of not more than nine months. Member banks are even permitted to make longer loans than this on sufficient security.

Though the Federal Reserve Board has somewhat restricted the eligibility for rediscount of loans made on certain types of

commodities, in common practise almost every important commodity which is dealt in can, under our commercial banking system, serve as the basis for a loan. Commodity loans may be conveniently classified as follows:

1. Loans secured by bills of lading.

2. Loans secured by warehouse receipts.

3. Merchandise loans, usually secured by chattel mortgages, leases or conditional sales agreements.

4. Funded loans secured by basic commodities.

There are, of course, many other types and possible classifications of commodity loans which it is scarcely necessary to note in this connection.

LOANS SECURED BY BILLS OF LADING

1. One of the commonest forms of commodity loan is that secured by the *bill of lading,* which is simply the detailed receipt given by a transportation company of any sort to the shipper or seller of goods. A duplicate of this receipt must be sent to the consignee, who must present it in order to secure possession of the goods shipped. Bills of lading may be "straight" bills or "bearer's" bills. The latter is negotiable, while the former is not. In order to prevent fraud and to bring about standardization, uniform bills of lading acts have been adopted by about half the States, while a Federal Uniform Bills of Lading Act became effective on January 1, 1917, relating to interstate and foreign shipments.

The use of the bill of lading as security for a temporary loan may be illustrated as follows. A company shipping, let us say, grain from a middle western city to a consignee in one of the New England states has arranged with the purchasers to secure payment by means of a draft drawn on the purchaser's eastern bank. This may be either a "sight" draft or a "time" draft depending upon the terms of sale. In the case of slow-moving and non-perishable goods, however, probably a time draft will be used. At all events the seller, having turned over his goods

to the transportation company, may wish to receive payment at once instead of waiting until the maturity of the draft or until it could be paid through the usual channels. He will, therefore, take the draft which he has drawn on the eastern bank to his own bank where it will be "discounted" and the proceeds charged to the shipper's account. This will end the transaction so far as he is concerned. His bank will then send the draft, together with the bill of lading and perhaps other documents, to its correspondent bank in the buyer's city or locality, or the papers may be sent direct to the purchaser's bank. In any event, the buyer will be notified that the bill of lading has been received and that he can obtain possession of the goods by paying the draft, if it is a sight draft. If a time draft is used, the buyer must "accept" it, whereupon he may, under certain restrictions, have access to the goods, usually after signing a trust receipt which entitles him to make use of the goods as the bank's *trustee*. Through the usual bank clearing-house operations, the western bank receives the money which it has advanced to the shipper of the goods. If the draft had been drawn directly on the purchaser instead of on his bank, the transaction would have been put through in a very similar manner, except that the eastern correspondent bank would have dealt directly with the consignee, and would have collected from him or his bank at maturity.

In this manner an enormous volume of shipments are financed without any particular regard to the current financial position of the parties directly involved. A specific consignment of goods serves as the security, and the transaction is normally almost immediately liquidated. Such borrowing is really an *anticipation* of the payment of a definite short time obligation rather than a means of raising more working capital. The use of bills of lading for such borrowing is largely confined to food products or commodities which from their nature are quickly sold. In the case of perishable products, sight drafts are generally used, and the banks merely *facilitate* payment of the bill.

WAREHOUSE LOANS

2. At all times there is a large quantity of goods held in warehouses in the United States, either after purchase by the merchant or awaiting shipment. The goods thus stored are almost innumerable. They include both bulky manufactured goods and raw materials, food products, and finished materials of different sorts. The rulings of the Federal Reserve Board have included a very wide variety of goods which, in storage, may serve as the basis of commodity loans eligible for rediscount with Federal Reserve banks. Readily marketable staples have been broadly defined as *articles of commerce, agriculture or industry of such uses as to make them the subject of constant dealings in ready markets,* with such frequent quotations of prices as to make (*a*) the price easily and definitely ascertainable, (*b*) the staple itself easy to realize upon by sale at any time. Goods falling under this classification are such as the following:

Grain, cotton, wool, silk, metals, coal, oil, hides, leather, building materials, canned foods, sugar, coffee, tea, tobacco, and the like.

Most states have licensed and carefully regulated warehouses, and there are also a large number of federally licensed or "bonded" warehouses in which goods are stored, sometimes for long periods of time. The warehouse issues to the owner of goods a receipt covering the specific items deposited by him. These receipts may be either negotiable or non-negotiable depending upon the conditions of issue. The holder is entitled to possession of the goods specified in the receipt upon its return, properly endorsed, and the payment of all charges, advances and liabilities in connection with the storage of the designated goods. Obviously, therefore, the holder of a warehouse receipt has a definite title to valuable goods, and it is important that the management of the warehouse be carefully regulated so that damage during the time of storage will not result and so that fraud will be prevented. Practically all states have, therefore, adopted *uniform warehouse receipts acts,* and in 1916 a United States Warehouse Act was passed (amended

in 1919), which provides for the licensing of warehouses for agricultural products by the Secretary of Agriculture. The act covers specifically grain, cotton, wool, tobacco and flax seed.

The owner of goods, pending the time of shipment or sale, may borrow from his bank on his promissory note secured by warehouse receipts. It will not ordinarily be possible, however, to borrow up to the full market value of such goods. Because of possible fluctuations in price pending the time of sale it will be necessary for the banker to protect himself by a margin which may be adjusted according to the commodity and business conditions. This margin may vary from 10 per cent to 25 per cent. In lending on cotton, it is common for the banker to require a "differential" margin, that is, when the market price is higher, a wider margin of protection will be required than when it is low. In the latter case there is more possibility of a drop in price which might undermine the security of the loan. Naturally the bank which lends on such security must at all times keep itself protected, and, if goods are removed by the borrower for the purpose of shipment or manufacture against a trust receipt, either other collateral of equal value must be substituted or a proportionate amount of the loan should be liquidated.

This type of "carrying loan" has been found almost essential for many industries, though it is of chief interest to dealers in agricultural products and to *distributors* of goods rather than to manufacturers. In connection with warehouse loans there is, of course, the possibility of much credit inflation, particularly if goods are being held in storage for speculative purposes. The bank should not periodically renew these loans, nor should the time of the loan ordinarily be extended for a longer period than would be necessary to permit the shipment, manufacture or reasonably immediate sale of the goods. The maximum time limit of such loans is normally about 90 days, though there are wide variations in practise.

3. Sometimes temporary loans are made on the security of specific merchandise in the borrower's possession. Usually only a business in sore distress would find it necessary to raise funds in this manner. Sometimes a *chattel mortgage* is given

to the creditor which covers practically all of the borrower's movable possessions, and which ordinarily indicates that the borrower is only one step from bankruptcy. There are occasions, however, when sales are frequently financed in this way because of the long terms of payment granted to the purchaser. The "lease" and "conditional sales" contract are also sometimes used when liberal credit is granted to the purchaser. This is a common practise when goods are sold on instalment payments. The lease indicates that the title to the goods vests in the hands of the seller, to whom periodic payments are made by way of "rental" until bills are liquidated. The conditional sales contract is similar to the lease in that it provides that the seller shall retain the title to the property until the full price is paid. As a rule, such collateral security as the latter would be frowned upon by the commercial banker, though it might serve as the basis of a loan from a discount company.

4. There has recently developed within rather narrow limits a type of loan which may be called the "funded commodity loan." The most interesting example is furnished by the issue of $40,000,000 of merchandise-secured notes put out by the Copper Export Association early in 1921. This loan was secured by 400,000,000 pounds of refined copper held for export by the leading copper companies of the United States, and valued at 10 cents per pound. In view of the fact that the foreign demand for copper was temporarily very low, and it was uncertain when the companies would be able to liquidate their inventory, the purpose of this issue was to relieve the banks of loans which threatened to be of too permanent a nature, and to put the companies in such a position that they would be free from immediate financial difficulties. The notes carried 8 per cent interest and matured serially over a period of four years at the end of which time the entire loan would be liquidated. The notes were also redeemable as a whole or in part on any interest date at a slight premium. A large proportion of the notes were soon called for retirement, and more than half of the copper was rapidly sold. The price of copper in the meantime had risen appreciably, and the transaction proved highly satisfactory.

Obviously it was a rather clever scheme on the part of the distressed copper companies to turn over their excess inventory to the Copper Export Association which they had formed. The latter serving as the borrowing agency, could in this manner raise funds which would strengthen the parent companies. As a basic and non-perishable commodity furnished the security, and as it was valued at a record low price, little risk apparently was incurred by borrowing in this manner, though it is unusual to finance the carrying of inventory by such means. However, in this case it was not the business of the commercial banker to finance the copper companies.

Less favorable comment must be made on a recent issue of bonds put out by the Brazilian Government amounting to nearly $45,000,000, the security for which is coffee held in government warehouses. This new bond issue runs for 30 years, and a sinking fund of only 1 per cent per annum is provided. The Government has undertaken to keep the loan secured at all times by at least a 20 per cent margin, based on the selling price of coffee. Such methods of financing the storage and sale of a consumable product could scarcely be followed by any private company.

Pledging Receivables

Various terms are used to refer to the practise occasionally followed of borrowing on the "receivables" of a business concern. The transaction is sometimes called *discounting receivables, pledging* receivables, *hypothecating* receivables, selling accounts receivable, and the like. The discount of trade acceptances or notes receivable is, of course, a very common practise, particularly on the part of smaller and weaker concerns, and working capital is sometimes thus secured from banks or discount companies when the current position is not strong enough to warrant an unsecured loan. In other connections attention has already been given to this matter.

Of particular interest, however, is the selling or "pledging" of a company's open book accounts. This may be done by "assigning" ("hypothecating") certain of the better accounts

to the ordinary bank or by resorting to some financial or commercial credit company. Ordinarily, only the *best* accounts receivable can be used for this purpose, and even then the loan will not be made in excess of 80 per cent of the face value of the accounts, accompanied, of course, by the promissory note of the borrower.[1]

When accounts are pledged in this manner, specific details about each account must be given to the creditor. Collections may be made either through the borrowing company, as before, or through the banking house which takes the accounts as security. The former practise is more convenient and certainly more agreeable to the borrower, and is the method generally followed. When such loans are made, the interest rate charged is usually much higher than the customary rate. The credit companies usually demand about 1 per cent monthly, plus a service charge based on the total volume of accounts annually purchased from the borrower.

The reputable commercial banker is not interested in lending on open accounts except under unusual conditions when his loan may be better secured thereby. Indeed, as a rule the bank does not wish to lend at all to a customer whose position is so weak that he must pledge his receivables. Certainly the security could actually be no greater after the accounts were

[1] The following form is sometimes used in pledging receivables:

FORM USED IN PLEDGING RECEIVABLES

No.................. Date...............19...

THIS CERTIFIES THAT

....

....

IS INDEBTED TO

....

FOR GOODS SOLD AND DELIVERED AS STATED BELOW

SHIPPED VIA.............................. TERMS..................

KNOW ALL MEN BY THESE PRESENTS, That I/we ....
.... for value received have

(Footnote continued on next page.)

assigned than before, unless, of course, collections might be made prompter or a more careful line might be kept on the borrower. Sometimes, as a result of unfortunate circumstances, a hitherto satisfactory client may have his current position so weakened that the banker will rest easier if such security can be given for loans already contracted. This would be a rather exceptional case. A more valid reason for lending on open accounts would be the fear on the part of the bank that the sole owner of a small business might, because of age or illness, be in immediate danger of leaving his position, as a result of which there might be a change in management detrimental to the interests of the business.

Also, there are many instances when a new concern has started without sufficient working capital, though the character and capacity of the management are wholly satisfactory. In such cases the banker may be a personal friend and be willing

bargained, sold, assigned, and transferred unto, and by these Presents do bargain, sell, assign and transfer unto THE MERCHANTS NATIONAL BANK, of Boston, Mass., its successors or assigns, the claim or account set forth in the above statement, and the goods covered by or described therein, and the right to collect and receive all moneys due and to grow due upon the same for sales therein set forth; and $\genfrac{}{}{0pt}{}{\text{I}}{\text{we}}$ hereby constitute and appoint .... $\genfrac{}{}{0pt}{}{\text{my}}{\text{our}}$ true and lawful attorney, irrevocably, for $\genfrac{}{}{0pt}{}{\text{me}}{\text{us}}$ and in $\genfrac{}{}{0pt}{}{\text{my}}{\text{our}}$ name and stead but to...........own use and benefit, to sell, assign, transfer, set over, compromise, or discharge the whole or any part of the aforesaid claim or account, and for that purpose to do all acts and things necessary or proper in the premises, and to substitute one or more persons with like power, hereby ratifying and confirming all that $\genfrac{}{}{0pt}{}{\text{my}}{\text{our}}$ said attorney or...........substitute or substitutes shall lawfully do by virtue hereof.

$\genfrac{}{}{0pt}{}{\text{I}}{\text{we}}$ hereby guarantee and certify that this amount so assigned is a bona fide sale and a correct account for goods actually sold and delivered and accepted, and agree that any claim or deductions allowed will be refunded by $\genfrac{}{}{0pt}{}{\text{me}}{\text{us}}$ by allowing the same to be deducted from future advances or by payment of the amount of such deductions in cash at the option of the said MERCHANTS NATIONAL BANK, of Boston, Mass., and $\genfrac{}{}{0pt}{}{\text{I}}{\text{we}}$ also guarantee the payment in full of the above account not more than........... days after maturity.

IN WITNESS WHEREOF $\genfrac{}{}{0pt}{}{\text{I}}{\text{we}}$ have hereunto set $\genfrac{}{}{0pt}{}{\text{my}}{\text{our}}$ hand and seal this

.............................day of..........19 ...

..........................(Place Seal Here)

to lend on security as above indicated. It would obviously be much better for the new business to pay its cash discounts and borrow in this manner from the bank than to lose the discounts and let itself be financed by dealers. Generally speaking, if the loan is to be a "character" loan, the bank's position appears to be little strengthened as a result of taking the borrower's accounts receivable. Finally, banks sometimes make a practise of lending *only* on the security of customer's *notes* receivable in the case of certain types of houses which sell goods on the instalment plan.

It has frequently been urged that rapidly expanding concerns cannot secure sufficient working capital without borrowing in this manner. Such a claim is usually invalid. The proper answer nine times out of ten is that the concern is expanding too rapidly if its working capital requirements exceed its capacity to borrow through the normal channels. Nor would any reputable bank continue to extend the same line of credit to a company which pledges its receivables. Obviously, therefore, the practise is more properly thought of as the last resort of a company whose financial straits are such that the commercial banks will not or cannot lend the needed amount of money. The credit position of any business is seriously impaired when it becomes known that accounts are being hypothecated.

During the War years commercial credit and discount companies, financial corporations, and the like, were organized in large numbers. Some of them are houses of high standing, and are well supplied with capital. On the directorates may be found a number of the leading bankers of the country. They deal not only in open accounts, but in notes and acceptances of every description. They frequently borrow heavily from commercial banks, either on their own promissory notes or by pledging notes which they have already discounted. Some of these houses appear to have made a good deal of money before the break in prices. In certain instances they seem to have been encouraged by the commercial banks themselves, which found it difficult to meet all of their customers' legitimate needs because of the rapidly increasing prices.

During the period 1921-1922, however, many of the discount houses found themselves in serious difficulties because of numerous failures among their customers. Ultimately the commercial bank itself supplies the money which is passed on through this new type of financial middleman to the borrower whose credit is not good enough to enable a direct loan to be secured. To be sure, risks are more evenly distributed through the intervention of the discount company, but it is a question whether there is much economic justification for the practise so far as *industrial* borrowers are concerned.

Financing Automobile Sales

The factory value of automobiles sold in 1919 is reported by the Census Bureau to have been $2,388,000,000. In value of product this industry then ranked third, after slaughtering and meat packing ($4,246,000,000), and iron and steel ($2,829,000,000). In 1928 the retail value of motor vehicles, parts and accessories was probably almost $6,000,000,000. Obviously, therefore, the problem of financing automobile distribution is a significant one and presents a number of real difficulties, since the automobile was until recently considered by most bankers to be in the luxury class. Therefore, it has apparently been necessary to develop new methods of financing in this industry.

The loans made in connection with automobile sales are a cross between commodity loans and loans based on the pledging of receivables. There are numerous differences in practise, and some of the larger automobile manufacturers, as for example the General Motors Corporation, have organized their own schemes of financing. In many cases the automobile manufacturer draws sight drafts against the dealer to whom cars are sent. It thereupon becomes necessary for the dealer in some manner to finance himself while the cars are being sold to retail distributors or to the public. The automobile finance corporation has developed as the financial middleman to enable the transaction to be put through. Stripped of details and variations, the general method of financing the distribution is essentially as follows, a slightly different policy being adopted for the handling of large scale financing needed by the impor-

tant distributors and the "retailer's" loans commonly made by the smaller companies.

In accordance with the so-called "wholesale" plan, the cars, pending their sale, may be stored in a licensed warehouse, and if they are sold on a partial-payment plan a chattel mortgage, lease, or conditional sales agreement will be required of the purchaser, depending upon the local circumstances. At all events, whether the car is in storage or has been sold, the dealer will have in his possession documents which indicate his right to a certain number of cars. With these instruments as security he can borrow from the automobile bank, or sometimes from a regular commercial bank, a large proportion of the selling price of the car. The actual percentage will vary according to the standing and financial responsibility of the dealer himself, since he will ultimately be held responsible for the payment of the loan. When cars are kept in a warehouse, it sometimes happens that the manufacturer will endorse the dealer's note, and at any rate the banker in such cases would require a trust receipt. It is evident that with a relatively small amount of capital a dealer might in the manner indicated finance the distribution of automobiles, since there is normally a wide margin between the amount which he pays to the manufacturer and the selling price of the car. The length of such loans varies, and much will depend upon the terms of sale which the dealer makes to his customers, since the loan can be liquidated only out of the payments which he receives.

The other common plan of raising the necessary loan is for the dealer to pledge to the banker or finance corporation the customer's note which he has taken in payment for the car. For example, when cars are sold on the instalment plan, as is usually the case, it is customary to require a first payment varying from 20 per cent to 30 per cent of the purchase price of the car. A note will be taken for the balance, which usually carries interest, and which calls for definite monthly payments extending sometimes over a period of six or eight months. With the customer's notes as collateral security it may be possible for the dealer to borrow up to 80 per cent of the face of the notes. Consequently, with a thin margin of his own

capital, or perhaps without using any of his own capital whatever, it may be possible for him to finance the sale of the cars. Then periodic payments will be made on the loan until its liquidation. The finance corporations, in turn, may borrow from the banks in order to finance themselves, or they may sometimes sell notes on the investment market. The source of their funds, however, is not of particular concern in this place.

Until 1920 this system of financing automobile sales appeared to be highly profitable, inasmuch as the finance corporations impose a "service charge" covering the interest, insurance, fees, profits, and the like, by discounting the dealer's notes at a flat rate in addition to the usual interest charge, which, of course, is higher than the finance company itself pays. However, when prices broke it was found that automobiles were by no means a liquid asset. The purchasers were unable in many cases to meet payments, the dealers had very slight resources, and the only course open to the discount companies was to recover the partially used cars for which under the circumstances there would be no sale. Many companies, therefore, failed, while most of the remainder passed their dividends. During the prosperous years many fraudulent or loosely managed automobile finance corporations were organized on the basis of wholly exaggerated claims. Recently sounder policies have been followed.

Beyond a doubt, the *dealer* in automobiles must be financed in some way. If the banks will not assist him there may be a real economic necessity for the finance corporation. Basically, however, the whole scheme of automobile financing is questionable from the economic point of view, in so far as it relates to the ultimate consumer. The danger arises from selling cars which are customarily used for pleasure purposes, on a credit basis. It is probably unsound economically for the *ultimate consumer* to be allowed to contract debts in connection with the purchase of luxuries, or even of necessities, for that matter. Any system of financing which permits the consumer to spend his income before he receives it is usually unwise. Whether for the individual, the corporation, or the nation, when expenditures outrun income for any considerable period of time,

bankruptcy becomes inevitable. Yet the most recent reports show that more automobiles are now being manufactured per month than at any time in previous history, and probably 75 per cent of these new cars will be sold on credit. So long as our great prosperity continues, no harm may result; but any serious drop in employment would probably lead to disaster. The development of such a situation will be interesting indeed to watch.

Security Loans

Security loans are normally made either for consumption purposes or in order to carry on stock exchange speculations. At June 30, 1927, it appears that 31.80 per cent of the loans of national banks were secured by stocks and bonds, amounting in the aggregate to $4,439,000,000. About 50 per cent of the amount was in time loans, and perhaps not *wholly* used for speculative purposes. There seems to be a growing practise among certain types of conservative business men, particularly in the case of unincorporated enterprises, to invest a certain amount of surplus earnings in high-grade securities which may on occasion be used as collateral for loans needed to finance current transactions. As the investment field is broadened through the introduction of government and high-grade industrial securities as well as by the use of bank acceptances, business concerns are finding it possible to invest their surplus cash for brief periods in a manner which will net them a high interest return. A strong company may find it very profitable indeed to buy securities when prices are low, which will serve as collateral for an industrial loan as occasion arises and which will appreciate in value in the course of time. Such disposal of the earnings of the company needs to be handled with much caution. However, it is probable that for the immediate future a good many business loans will be secured by collateral, not because the borrower's position is a weak one, but because it has not chosen to maintain a liberal line of credit at its bank. There are emergency occasions, also, when a company finds itself in possession of collateral which has shrunken

in value to such an extent that it seems wiser to make a collateral loan than to sell the securities in order to finance working capital needs.[1]

Dealer Credit

The customary terms of sale in certain lines of industry are long, whether between the manufacturer and the dealer or between the dealer and the ultimate consumer. The terms have been proverbially long in the agricultural implement business, piano manufacturing and distribution, furniture, store fixtures of all sorts, printing machinery, sewing machines, radios, phonographs, refrigerators, and many of those types of goods which are sold through canvassing agents. In such cases *installment* notes are usually taken from the customer, and under a conditional sales agreement the actual ownership vests in the seller until all payments have been made. Notes sometimes run as long as two or three years, with periodic payments. Such notes can ordinarily be discounted or pledged as collateral for a loan up to a large percentage of their face value. Certain types of companies which sell goods in this manner even thrive because of the defaulted payments of their customers, which makes it possible for them to recover the goods and resell them as new.[2]

[1] It is scarcely necessary in this connection to discuss the various aspects of *personal* collateral loans. Provided the security deposited is satisfactory and provided an ample margin is maintained between the face of the loan and the market price of the securities, the banker does not ordinarily need to be particularly troubled by such loans. However, the possibilities of loss in connection with collateral loans are forcibly brought to one's attention by the recent episode in connection with the collateral loans of Allan A. Ryan. It was stated on August 2, 1922, that the securities pledged by him to cover loans in excess of $14,000,000 were sold at auction for only $3,615,000. One of the most prominent banks of the United States was probably subject to a loss of more than $10,000,000 in this particular transaction. The chief security deposited was stock of the Stutz Motor Company which in 1920 was pushed by speculation to almost $400 a share until it was stricken from the list by the Stock Exchange. The stocks pledged at this inflated price, only two years later were sold for $20 per share.

[2] In connection with rural credits, an interesting practise has developed, particularly in the southern states, in accordance with which local merchants frequently finance small planters while they are raising and gathering their crops of cotton and tobacco. A certain "line of credit" will be arranged at

The working capital requirements of a company which sells on the instalment plan are relatively very large, and much uncertainty is connected with the business. The dealer must pay his bills long before he, in turn, receives payment from his customers. Also there will always be an appreciable number of customers who will find themselves unable to make regular payments no matter how good their intentions. Instalment houses have their greatest difficulties either when the business is new and the "outgo" for goods far exceeds the income from instalment payments on the notes which they hold, or when prices are rapidly rising and the purchase of new goods necessitates much higher expenditures.

Our chief concern, however, is with that type of "dealer credit" which is not *habitually* given to the purchaser, but which is extended to him as occasion may seem to warrant.

the store which will enable the farmer to purchase all the supplies which he needs until the crops are harvested. As security, the merchant usually takes a lien on the crop and perhaps also a mortgage on the borrower's property. In this manner the weaker farmers are constantly being supplied with "working capital" by the local merchant. The practise is sometimes referred to as a "trade credit."

It is also common for many concerns which sell the commodities needed in the agricultural industry to extend long time credits to farmers, sometimes without any security and sometimes merely on the purchaser's promissory note. There is a growing practise of making "seed loans" to farmers, particularly in some of the Northwestern States. Sometimes money will be actually advanced by supply houses, which act as bankers. In this manner not long ago the state of North Dakota sold "seed loan bonds" in order to provide farmers with working capital during the crop-growing season. Some of the recent financial difficulties in agricultural districts resulted from reckless land and produce speculation, encouraged by the all too easy extension of credit to the farmers. Governmental policies have perhaps unduly favored rural credit granting.

Cattle *loan* companies have been organized in the western states for the purpose of financing stock raisers. These loans are secured by chattel mortgages on cattle of registered brands. Advances are made by the loan company to the stock raisers, and range from six to twelve months in duration. This so-called "cattle paper" may be either (*a*) feeder paper, (*b*) steer paper, or (*c*) stocker and breeder paper. "Feeder loans" usually run from three to six months and finance the pasturing and intensive feeding of matured cattle which are almost ready for slaughter. "Steer loans" serve to finance the cattle man while steers are being pastured and properly fed during the summer and winter periods until they are ready for shipment to a stockyard. "Stocker" and "breeder loans" help to finance the stock raiser and breeder in maintaining his cows and heifers until his annual returns from the sale of calves and steers puts him in a stronger financial position. Much of this "cattle paper" is available for rediscount by Federal Reserve banks and qualifies for legal investment by national banks.

Both in manufacturing enterprises and in the retailing business there are occasions when sellers will assist deserving individuals to meet their working capital needs through the extension of extraordinarily long credit. Sometimes in the case of retail distributors, goods may be sold on "consignment." This means that the buyer of the goods will be acting merely as a "factor," "broker" or distributing agent for the seller, and will be under contract to make payment to the selling house as rapidly as goods are sold. In the meantime title to the goods remains in the consignor. In such cases it may be possible for the retailer to finance himself with a very small amount of working capital.

Whenever extra long credit is extended to the buyer of goods, it is highly important that the supply house shall be thoroughly informed as to the character and capacity of the individual or business to whom credit is extended. It is also essential to know that the business is being conducted along sound lines, that operating costs are low, that the turnover of goods is rapid and that the minimum amount of money is invested in fixed assets. Further, a distinct limit should be placed upon the amount of credit which the purchaser is permitted to extend to his customers, or, preferably, he should be required to do business on a cash basis. Under such circumstances the risks of the selling company will be minimized.

There is, however, a fallacy underlying this use of dealer credit. Two evils arise. First, the purchaser loses his cash discounts which might in the aggregate be sufficient to net him a handsome profit for the year. Secondly, there is grave danger that the business to which credit is extended in this liberal fashion will "over-buy." Frequently such dealer credit has been used merely as a method of increasing sales, rather than for the purpose of fostering the growth of some struggling but deserving small business.

In the great majority of instances harm results, and it would have been far wiser for the small business man to restrict his purchases, speed up his turnover, and thus put himself in a position where he would be able to borrow from his banker an amount sufficient to enable him to take his cash discounts.

Before this point has been reached the "discount company" frequently steps in and persuades the small business man that it is more profitable for him to pledge his receivables, even at a high rate, so that he can take his cash discounts, than to continue to accept dealer credit. Few luxuries are more expensive than dealer credit. Inasmuch as terms frequently given are 2 per cent, 10 days, net 30 days, it is obvious that a customer who loses his 2 per cent for cash payment within 10 days, is really losing money on his purchases at the rate of 2 per cent every 20 days, or 36 per cent per annum. Consequently it would be distinctly advantageous to borrow even at a high rate an amount sufficient to enable cash payments to be made. Obviously, no small concern which is unable to discount its bills payable should be so foolish as to extend credit to its customers. By putting its business on a cash basis it will be possible for the current position to be strengthened so that this expensive assistance will not be needed.

The Small Borrower

The small business borrower appears sometimes to have been discriminated against by city banks, when as a matter of fact his account was refused because it would be wholly unprofitable for the bank to take it. The very small business man frequently is not sufficiently familiar with the ways of finance to make it desirable for him to borrow at all. He may not know how to make the proper use of credit. In the smaller places, however, no worthy business man finds it impossible to secure from his bank any aid to which he is properly entitled.

Many of the lesser bank loans are made on the security of *character,* and perhaps of capacity, without much reference to the strength of the current position or the general financial resources of the borrower. Sometimes such loans are based on the endorsement of friends or better known business men in the community. This practise, however, is rapidly passing, for a business man who manages his affairs properly will not, except under the rarest circumstances, sign "accommodation" paper. Further, the banks have found that only ill-will results

in attempting to force the endorser of a note to make good on the payment when the promisor has defaulted. Generally, therefore, this method of raising money is not to be considered by the newly launched and struggling enterprise. Occasionally, also, urgently needed working capital has been raised by borrowing on insurance policies or by placing mortgages on real estate owned. Such methods have frequently assisted the beginner to get his start, though they are to be condemned in the case of a business which has become established.

Cooperative credit organizations for small business men have not developed in this country to the extent that they are known, for example, in Germany where the Raffeisen banks have made possible the economical financing of small tradesmen and craftsmen. There is, however, an increasing development of *"credit unions,"* the first having been organized in Massachusetts about 1909. These credit unions are usually organized among certain closely knit groups whose members know each other well. Each member must ordinarily subscribe to one or more shares of capital stock, and he may secure small loans for productive purposes at very reasonable rates. Usually, however, such loans have been used for consumptive purposes, as is liable to be the case when the small borrower seeks funds.

Some 15 years ago an interesting development, known as the Morris Plan Banks, was launched. Recently there were about 150 banks under this plan, scattered throughout 30 states. They are operated by a parent company known as the Industrial Finance Corporation. The original plan was to make "character" loans of small amount for provident purposes. It is necessary to secure the signatures of two "co-makers" or guarantors before the application for a loan will be accepted. In recent years these banks have also been making loans to small business men for working capital purposes, and have gone heavily into the acceptance business.

It is a question, however, whether such organizations really perform any service which could not be performed even better by the ordinary commercial or savings banks. There may still be an opportunity for the development of credit-granting institutions specializing in loans to small business men. But it is highly probable that they already have too many facilities

for incurring obligations which it is difficult to meet. While much sympathy has been spent on the struggling borrower, in most cases what he needs is not more credit, but *more capital;* not an opportunity to contract further debts, but a little more common sense in his business methods so that he will put himself on a cash basis.

In recent years many metropolitan banks have been making small personal loans in an effort to combat the "loan shark" evil. In this connection attention should be called to the recent experience of the National City Bank of New York which, for the year ending May 1, 1929, made around 51,000 unsecured personal loans for a total of $16,500,000—an average of about $320 per borrower—at an over-all interest rate of only 6 per cent. These loans are paid off by weekly or monthly deposits in a 3 per cent compound interest account, and practically all borrowers have made their payments regularly.

Installment Sales

It seems unnecessary here to go into details on the subject of *installment* selling and financing. The principle is sufficiently clear. Facilities for financing such sales are ample and the *volume* of sales has unquestionably been increased by this easy payment method. Probably $5,000,000,000 out of $40,000,000,000 retail sales are now made on installments. Late in 1928, the National Association of Finance Companies started a movement toward securing legislation which would make installment paper eligible for rediscount by Federal Reserve Banks.

The point of view of many business men and economists has changed markedly on this question in recent years. If easy payment methods of this sort result in a net increase of production and human efficiency, probably they justify themselves. However, whatever may be true with respect to producers' goods, such as machinery and motor trucks, it is very questionable whether buying consumers' goods, such as pleasure cars and radios, ahead of income, leads to any permanent economic gain. On the contrary, it is dangerous to judge the merits of this practice by the experience of a few unusually prosperous years. There is still good reason for believing that prosperity will be exaggerated and the following depression aggravated by the extensive use of this additional form of "consumer credit."

CHAPTER XIX

PURCHASING IN ITS FINANCIAL ASPECTS

The prime importance of the purchasing policy—General considerations affecting the purchasing policy—Specific factors affecting the advance purchase of goods—The technique of buying—From how many sources shall purchases be made?—Controlling the source of supply—Hedging operations—Contracts, commitments and cancelations—Commercial bribery—Larger orders *vs.* smaller orders—Overbuying—Losses in buying.

AN analysis of the United States Census figures covering the year 1909 reveals the fact that for all manufacturing industries in the United States the cost of materials purchased ($12,143,000,000) amounted to 65.8 per cent of the total expenses ($18,455,000,000) and 58.7 per cent of the selling price of the goods manufactured. In 1919, 60 per cent of the value of all manufactured products was required to defray the cost of materials used ($37,380,000,000) while the entire amount expended for wages and salaries ($13,439,000,000) was little more than one-third as great. In many industries the value of materials used amounts to 80 per cent or 90 per cent or even a higher proportion of all operating expenses, including interest. Normally more than half of the current assets of the average manufacturing company are in the form of merchandise inventory in different stages of production, and the inventory item very frequently amounts to more than 25 per cent of all the assets of a manufacturing concern. In distributing enterprises, materials (in finished form) constitute a much higher proportion of all tangible assets, in fact they are sometimes practically the *only* assets aside from the small proportion of cash.

It is further significant to find that in the year 1909 the average net income of all manufacturing businesses in the United States was 10.8 per cent of the value of their product. In 1926 the net income of all incorporated manufactur-

ing concerns, after depreciation, interest, and all taxes, was scarcely 6.0 per cent of the gross sales ($59,863,000,000), while for trading corporations the ratio was much lower, around 2.0 per cent (on total sales of $39,403,000,000). It is evident, therefore that in order to gain one dollar of net income, the average manufacturing business must now sell more than fifteen dollars' worth of additional goods. In other words, for every dollar lost in connection with the purchase of materials it would be necessary to sell a quantity of goods equal in value to sixteen times the amount of the loss! Reduced to a *quantity* basis, 10 per cent more units of finished product would have to be sold in order to recoup the loss incurred as the result of unwise buying, since the average value of materials purchased is equal to 60 per cent of the selling price of the product. Every dollar saved in the purchasing department is clear gain, while every dollar lost would require a ten-fold increase in the *volume of sales,* so far as that dollar is concerned, in order to recover the particular loss, provided the unwise purchase policy were spread over all materials bought! Obviously, no business can long expand at this rate (the average "normal" annual rate of growth being from 3 to 5 per cent), nor would it in most cases be possible to recover the loss through greater operating efficiency. Also, competition of the better managed concerns would normally prevent the seller from passing on this additional expense in the form of an increased price to the consumer in order to cover the additional costs incurred in connection with the purchase of materials. For trading concerns, by the same reasoning, it would be almost necessary to double gross sales!

Apparently, therefore, any purchasing department can through bad judgment and bad buying lose money for a business at a rate so rapid that all profits can be speedily wiped out. In fact, losses arising either through paying too high prices for material or through the shrinkage in value of material already bought, are frequently cumulative and tend to increase almost in a geometric ratio, while business expansion can never progress more rapidly than in an arithmetical ratio.

Prices of raw materials frequently fluctuate in a most erratic

TABLE 40

MONTHLY RANGE OF WHOLESALE PRICES OF SELECTED BASIC COMMODITIES, 1920-21[1]

(Price Unit: $1.00)

Item	Unit	1920		1921	
		High	Low	High	Low
Calfskins (No. 1)	pound	.800	.150	.230	.130
Cotton (middling upland, spot)	pound	.430	.158	.197	.116
Wool	pound	1.100	.450	.500	.380
Pig iron	gross ton	48.50	33.00	30.00	18.20
Copper (electrolytic)	pound	.193	.140	.136	.117
Lead	pound	.092	.048	.050	.041
Coal (bituminous) (Pittsburgh)	net ton	11.00	2.35	2.75	2.20
Petroleum (crude)	barrel	3.50	3.00	3.50	1.00
Rubber (plantation)	pound	.535	.175	.215	.142
Sugar (duty paid)	pound	.216	.046	.060	.037

fashion. Not only is there under normal circumstances a marked spread between the high and low prices for a given year, but the cyclical changes in industry are accompanied by even more marked variations in different years. Whether the fluctuations in particular prices be seasonal, cyclical, due primarily to psychological influences, or merely the result of the normal interaction of supply and demand, it should be possible to arrange purchasing programs along much more scientific lines than have commonly been followed. Enormous losses, amounting in the aggregate to billions of dollars, and in individual instances to many millions of dollars, have been suffered by industrial concerns during the period 1920-1921, largely as a result of the adoption of unsound purchasing policies or as a result of the failure to outline any definite policy.

When the prices of basic raw materials can fluctuate to the extent indicated in the accompanying tables (Tables 40 and 41), and when the important influence which the price of raw materials has on the net income is clearly appreciated, it is easy to see why so many large corporations in the space of a year not only passed their dividends but lost all of the surplus accumulated over a long period of time.

Table 42 shows some illuminating contrasts in the inventory policy of leading industrial companies during the past ten years. Those companies suffered most in 1921 which had built

[1] Based on figures tabulated by the Harvard University Committee on Economic Research.

TABLE 41

INDEX NUMBERS OF WHOLESALE PRICES, 1810-1928[1]
(1914 = 100 Per Cent)

Year	Per Cent	Year	Per Cent	Year	Per Cent	Year	Per Cent
1810	173	1840	103	1870	148	1900	83
1811	168	1841	99	1871	137	1901	81
1812	170	1842	88	1872	142	1902	86
1813	198	1843	84	1873	141	1903	88
1814	247	1844	88	1874	134	1904	88
1815	194	1845	93	1875	126	1905	88
1816	165	1846	95	1876	117	1906	91
1817	167	1847	100	1877	114	1907	96
1818	163	1848	87	1878	103	1908	92
1819	141	1849	89	1879	99	1909	99
1820	123	1850	95	1880	110	1910	103
1821	118	1851	97	1881	107	1911	95
1822	121	1852	98	1882	109	1912	101
1823	115	1853	109	1883	103	1913	102
1824	114	1854	118	1884	93	1914	100
1825	115	1855	121	1885	87	1915	103
1826	113	1856	119	1886	85	1916	130
1827	111	1857	125	1887	85	1917	181
1828	108	1858	105	1888	88	1918	198
1829	107	1859	107	1889	85	1919	210
1830	103	1860	105	1890	83	1920	231
1831	107	1861	103	1891	82	1921	150
1832	108	1862	122	1892	77	1922	152
1833	107	1863	168	1893	79	1923	157
1834	104	1864	237	1894	70	1924	153
1835	111	1865	218	1895	71	1925	162
1836	125	1866	194	1896	68	1926	154
1837	120	1867	174	1897	68	1927	150
1838	116	1868	170	1898	71	1928 (est.)	153
1839	121	1869	166	1899	77		

up their inventory most rapidly. The outstanding example is furnished by the General Motors Corporation, which, after the payment of dividends, finally ended the year with a loss of more than $65,000,000. Those companies were most prosperous in 1927 which had made the biggest increase in their turnover of inventory, and those were least prosperous in which the turnover had decreased or merely held steady. Here again General Motors takes the lead, having doubled the inventory turnover, along with an increase in net sales of more than 100 per cent (from $567,321,000 in 1920 to $1,269,520,000 in 1927). At the same time the net income increased to $235,-105,000—a record high for all companies in peace time, until both records were again broken by General Motors in 1928.

[1] Mr. Ralph G. Hurlin made the computations for the period 1810-1889 from various series of index numbers. Figures since 1890 are based upon the revised United States Bureau of Labor wholesale price index of 404 commodities.

TABLE 42

Changes in Value of Inventory in Leading Companies and Turnover Rates[1]

(*Unit: $1,000,000*)

Company	1918	1919	1920	1921	1927	Turnover of Inventory (No. Times)	
						1920	1927
Bethlehem Steel....	79.6	67.5	73.2	39.2	67.7	3.9	4.0
Cuba Cane Sugar...	6.2	17.4	9.1	26.9	6.5	9.5	6.0
General Electric....	88.3	84.0	118.1	64.8	84.0	2.7	3.6
General Motors.....	91.1	128.7	164.7	108.8	173.0	3.9	7.7
Sears Roebuck.....	47.5	42.7	105.1	46.4	49.6	3.2	6.0
Studebaker.........	17.6	20.6	28.1	22.2	29.8	3.7	5.2
Swift & Company...	179.1	191.9	151.3	93.8	115.0	6.4	8.1
Texas Company....	53.5	86.1	110.3	74.6	95.3	1.5	1.4
U. S. Rubber.......	70.7	87.6	123.5	76.9	77.2	2.4	2.2
Woolworth.........	18.4	17.2	18.5	16.2	30.4	7.8	8.9

[1]End-of-year figures used. Turnover rates are based on average inventory and sales at *selling* prices; hence the apparent rate is somewhat too high.

The conservative policy of the F. W. Woolworth Company stands in marked contrast to that of the average manufacturing concern, though of course it must be admitted that the inventory problems of the trading business are more readily handled than those of manufacturers. However, the accompanying table[1] (Table 43) points to a situation which was

TABLE 43

Stock on Hand and Average Rate of Stock Turnover in Department Stores, 1919-1922

	Stock on Hand July 1 (Retail Price)				Annual Rate of Stock Turnover (First Half of Year)			
	1919	1920	1921	1922	1919	1920	1921	1922
All Dept. Stores.....	79	120	100	101	3.7	3.2	3.7	3.5
New York........	79	120	100	102	3.8	3.3	3.7	3.5
Buffalo...........	85	114	100	96	2.9	2.6	3.0	2.9
Newark..........	84	135	100	100	3.5	2.8	3.6	3.5
Rochester........	84	145	100	98	3.0	2.3	3.1	3.3
Syracuse.........	82	127	100	85	2.8	2.5	2.9	3.1
Bridgeport.......	83	119	100	101	3.0	2.9	3.1	2.7
Elsewhere........	76	101	100	99	2.2	2.1	2.3	2.1
Apparel Stores......	66	111	100	111	6.5	4.6	5.7	5.0

[1] The table is taken from the August, 1922, number of the *Monthly Review of Credit and Business Conditions,* published by the Federal Reserve Bank of New York.

almost universal even in the trading business in 1920. Apparently inventories were during the year swelled to a most dangerously high point, while the annual rate of stock turnover was correspondingly decreased.

If a business is to be successful it is absolutely essential that the purchasing policy be sound. No business concern can long hold its own unless it knows how to buy "right" in quality, in quantity, in price, and in time. No business is stronger than its purchasing policy. Excess inventory may easily tie up all of a company's working capital. Unwise buying, buying too much and at the wrong time, has wrecked the largest companies. There is no more vital spot than the purchasing department in the entire business organization. It is significant, therefore, in the study of business finance to give some attention to the purchasing policy in its financial aspects.

GENERAL CONSIDERATIONS AFFECTING THE PURCHASING POLICY

Until recently a good deal of buying has been done on "hunch" rather than on "knowledge." The successful purchasing agent was supposed to be a clever "trader" and the first aim in purchasing seemed to be to "buy cheap and sell dear." But the large organizations have found, sometimes as the result of bitter experience, that purchasing not only can be, but must be, put on a more scientific basis. To state it briefly, the important basis is *knowledge,* coordinated with common sense, shrewdness and foresight. Most important of all, no doubt, is the knowledge which can be gained through a careful study of the industry itself, the concerns from which it buys and to which it sells, the commodities used, the price levels and trends, market conditions, sales policies and especially the many phenomena of the *business cycle.* Specifically, the following considerations should be carefully noted by the individual who is responsible for the purchasing policy of a business.

1. While in many cases men who purchase goods have little if any technical knowledge regarding the commodities which

pass through their hands, no scientific buying can be carried on unless the one who is responsible for purchases has made a thorough study of the articles which he must handle. Such a study will include among other things the following:

(*a*) The qualities, grades, types, and similar features of the goods; (*b*) their technical history as well as price movements analyzed over a long period of time; (*c*) the various methods of producing or supplying the commodities, together with an analysis of the sources of supply. In the larger organizations, of course, there have been developed testing laboratories which pass in much detail upon the quality of goods bought and their suitability for particular purposes.

2. No man can purchase materials intelligently unless he has a thorough knowledge of his own establishment. He must, accordingly, inform himself on many diverse points:

(*a*) To what use are the goods to be put? (*b*) He should understand in general the manufacturing processes carried on by his company and the factory costs. (*c*) He should be definitely informed regarding the ultimate use of the goods produced from the materials which he purchases. (*d*) He needs to know as well as the sales manager the probable future demand for the type of goods which his concern manufactures together with the particular appeals which can be made to the buyers of the goods. (*e*) He should also be thoroughly conversant with the financial resources of his concern, and should know clearly when and how bills contracted can be met.

3. The concerns from which goods are bought should be carefully studied. The lines of investigation may properly cover such questions as the following:

(*a*) How are the articles made? What are the more significant processes in their fashioning? What *does* it cost, and what *should* it cost to supply the commodity in question? (*b*) What are the financial resources of the selling houses? What is their reputation? What are their policies and future plans? What character of service do they render? Can they be depended upon for prompt deliveries and satisfactory quality? (*c*) What, in turn, are their sources of supply? What raw

materials must they use? What influences most affect the supply of these raw materials? What is the transportation situation, and so forth?

4. It is highly important to study the operations of competitors in one's own line of business and to know something about their purchasing, production and selling policies. Thus comparisons can be made which are frequently advantageous, inasmuch as it may be possible thereby to improve one's own methods or to avoid difficulties which competitors have encountered. In like manner it is wise to make comparative studies of the various concerns engaged in producing the goods which are to be bought, even though actual purchases may for the time being be restricted to only a limited number of sellers.

5. Throughout, of course, it is most essential of all that general business conditions be carefully analyzed since most of the serious mistakes which are made in purchasing are due to a disregard of the trend of business affairs. So many statistics are now available for this purpose, furnished and even digested by governmental agencies as well as by private organizations, that it is scarcely necessary to give details on the matter.[1] It may be noted, however, that in certain types of business the short price "swings" rather than long trends are of most importance. When from the nature of the particular industry the turnover is very rapid, and single purchases are relatively small, it may be more important to watch immediate fluctuations in market conditions than to study cyclical changes in prices.

Finally, each business must consider all questions of purchase in the light of its particular needs and prospects. To

[1] Particularly useful in this connection are the data assembled by the Federal Reserve Board and published monthly in the *Federal Reserve Bulletin* The *Survey of Current Business* now being published monthly by the United States Department of Commerce includes figures of much value. as well as the *Monthly Labor Review* published under the direction of the Commissioner of Labor Statistics. There may also be mentioned the general data appearing in the *Standard Statistics Co. Service*. It is scarcely necessary to mention the innumerable collections of data applying to specific industries, which appear from time to time in the various trade periodicals. Such statistical services as that put out by the Harvard University Committee on Economic Research, and by Babson or Moody, will, of course, be of much value.

quote from Mr. A. W. Shaw, "The manager's broad policy on materials must be determined by his analysis of conditions from the standpoint of (*1*) the kind of material to be used; (*2*) the quality of material; (*3*) the sources from which material can be drawn; (*4*) the control of material; (*5*) the utilization in the factory."

SPECIFIC FACTORS AFFECTING THE ADVANCE PURCHASE OF GOODS

First of all, the buyer must ascertain the probable needs of the business over a certain period of time. This can be determined in cooperation with the sales department by a study of past performance, turnover of inventory, and the like. It should also be definitely known by what method the purchases of goods will be financed. With such considerations in mind, a well-managed company may be able to determine the maximum and minimum amount of certain lines which it can advantageously carry in stock at different times.

Since the purchasing problem of manufacturing concerns is usually much more complicated than that of distributing businesses, both because of the more rapid fluctuation of raw material prices as well as because of the time element, the problems of the former are particularly thought of in this connection. The manufacturing business must ordinarily buy at least a considerable portion of its material somewhat in advance of its needs in order to make sure that there will be no interruptions in its production and selling programs. The distributing business can much more frequently buy from hand to mouth without incurring very great risks, because it does not have any considerable investment in plant and equipment which might remain idle if materials were not promptly supplied. Perhaps the following considerations are of most importance in helping to determine to what extent goods should be purchased somewhat in anticipation of actual needs. For the sake of simplicity it is of course assumed that the buyer is in a position to finance whatever purchases are decided upon.

1. The question of *price* and the factors affecting it both directly and indirectly must be carefully weighed.

(*a*) Can the commodity be purchased for a lower price now than in the future? (*b*) Can a lower price be obtained by purchasing less frequently but in larger amounts? (*c*) Can more favorable terms of purchase (either a longer extension of credit or a larger cash discount) be secured by purchasing at the present time? (*d*) What will it cost to handle the larger amount of goods? (*e*) Will the cost of carrying the anticipated supply outweigh the money saving which may result from lower prices? In this connection should be considered not merely the interest on the money invested in the goods, but also the possible *alternative uses* for the capital tied up. While in some cases only nominal interest rates would have to be considered, ordinarily the actual "cost" would be much higher than this. (*f*) One of the very important considerations is whether the item in question plays so important a part in the making of the finished goods that its purchase price will have a material effect on the selling price of the product. If the price-determining influence of a particular commodity is almost *nil*, it would be absurd to purchase it in excess quantities unless for the purpose of protecting the supply. (*g*) It is finally significant to know whether the commodity is an object of speculation. If the price is influenced by speculation as well as by fundamental conditions, a new factor may thus enter into the purchasing policy.

2. The question of *quality* is always important, and will under many circumstances weigh more heavily than that of price. Among other considerations it is pertinent to know: (*a*) Will the quality of goods which can now be purchased be more suitable for the particular purpose than lots which can be bought at a later time? (*b*) Is the quality subject to seasonal influences, so that the goods purchased at this particular time will be of better "quality" than if the purchases were made later?

3. Factors affecting the *source* or *continuity* of supply are frequently of the utmost significance.

(*a*) Is there any liability of a shortage in the commodity so that it is advisable to purchase now rather than later? How significant would a possible shortage be in its effect upon the

company's operations? (*b*) What other concerns are buying this same item, and when is their demand heaviest? What purchase policy do they follow? (*c*) Is there any possibility that difficulties may arise in the companies from which purchases are made of such a nature as to lead to irregular deliveries? (*d*) Are there any possibilities of strikes or other unfavorable contingencies in the buying plant which might make it difficult to receive goods if bought at a later date? (*e*) What is the transportation situation? Is there any probability of delays in the future resulting from heavy movement of traffic, labor difficulties, or the like? Are rate increases pending which might affect the price of this particular commodity? (*f*) Is the supply of the commodity subject to seasonal influences? When are the conditions most favorable to securing an adequate supply at the lowest cost? (*g*) More or less relating to the foregoing considerations is the question of the quality of "service" which can be rendered by the seller in different periods. Frequently his own business is so arranged that he can offer much more satisfactory service in packing, shipping, fully meeting specifications, and the like, at one time of year than at another.

4. It is highly significant to know how the *storage* of the commodity will affect its ultimate cost to the purchaser.

(*a*) Will the expense of handling a large quantity of certain items be too greatly increased by advance purchases? What facilities does the company have in this regard? (*b*) Is there sufficient storage space and will the carrying of a particular commodity interfere with others which are kept in stock? Will it be necessary to incur additional expense for storage purposes? A commodity of large bulk and small value may sometimes be stored only with expense wholly incommensurate with its value. Frequently, however, other considerations outweigh this disadvantage. (*c*) One of the highly important considerations is to know whether the item will deteriorate in quality or quantity while being stored. In certain instances the answer to this one question will largely determine the purchasing policy.

5. Finally, it is important to reckon with the problem of *demand* for the item, both on the part of the purchasing company and on the part of the company's customers.

(*a*) Is the commodity regularly used by the purchaser, or does it play only an irregular and intermittent part in the production program? (*b*) Is there any liability that as a result of a change in policy or in the type of article manufactured this particular item may be no longer needed? (*c*) What is the market demand for the item after it is fashioned, or for those goods in the making of which it plays an important part? Is it probable that the demand will continue and be regular, or is the demand spasmodic and influenced by fashion, fad, and the like?

Not all of the factors above indicated will be of equal importance in influencing the purchasing policy in a particular case. There will be times when one favorable or unfavorable consideration will be of sufficient importance to outweigh all other considerations. No doubt, it is scarcely necessary in this connection to apply these numerous qualifications in a concrete case. Suffice it to say that they may in general be regarded as highly important determinants of a carefully planned purchasing policy, though other elements will, of course, enter into the decision.

As a matter of course, the purchasing problem is frequently much simplified when a concern makes goods only to order instead of for stock. In the former case the actual quantity needed can as a rule be very definitely determined, and many of the usual uncertainties can be eliminated in planning the purchasing program. In many lines of industry goods are now customarily being made up only as orders have been received, particularly when the element of style is present or when nonstandard commodities are desired. Also, quality goods are probably more frequently made to order than for stock. Those goods which from their nature deteriorate rapidly with the passage of time cannot as a rule safely be made before orders have been received. On the other hand, where more rapid production is possible and the goods turned out are low in price

or very definitely standardized, it is perhaps commoner to produce in anticipation of orders. While it would be rather difficult to prove the question statistically, there is a strong probability that the present tendency is toward the manufacture of goods after the receipt of orders rather than before. As market conditions are better understood and as industry is placed upon a more definitely scientific basis, the adoption of this policy will no doubt be more marked. The movement has not yet gone far enough, however, to solve in any measurable degree the problems of purchasing and carrying of inventories.

THE TECHNIQUE OF BUYING

As business is becoming more highly organized, the primitive method of bargaining is gradually being displaced by the more scientific practise of ordering on specifications through competitive bids. It is still desirable, however, for the successful purchasing agent to be a good "trader" and something of a "poker player." There are many circumstances under which it would be folly for the purchaser to "show his hand." Sometimes he can maintain his strategic position only by keeping his own counsel. It is frequently desirable when large lots are to be purchased, to get offers through independent channels and secretly, so that the buyer will not "bid the market up" on himself. It is scarcely relevant in the present connection to discuss the many interesting tactics and psychological considerations which from time to time play an important part in the buying game.

When prices are fixed, the problem of buying is a comparatively simple one. Of course, if the commodity is under monopoly control there may be methods of handling the negotiation which will make it possible for the purchaser to secure favored treatment, prompter service, and the like. However, the real problems of buying arise when, as is commonly the case, "open market" prices obtain. It then becomes necessary for the purchaser to make use of his wits and all the knowledge at his command. The "trade" which he can make will be

much influenced by the general business conditions as well as by the conditions peculiar to his particular industry. In a seller's market such as developed in many lines between 1917 and the early part of 1920, the purchaser labored under the necessity of accepting almost any terms or any quality of service which the seller might condescend to offer him. But the tables have been completely turned during the past few years so that buyers now have the upper hand in most cases and can pretty largely dictate what terms they will accept from those from whom purchases are made. The buying tactics used, therefore, will vary markedly from time to time.

Frequently too much attention has been given to the mere matter of prices in connection with the purchase of goods. No policy, however, can prove more disastrous if carried to its logical conclusion. Goods should be bought first of all on *quality* and past performance, since it is wholly impossible to render satisfactory service to one's customers unless quality is maintained. The aim should be to secure the lowest price, most favorable terms, and most adequate service, consistent with the most satisfactory quality. Frequently goods are offered at a low price merely with a view to getting the order. After the price has been accepted the seller may "fall down" seriously on deliveries and service, even though the specified quality may be maintained. Under such circumstances, however, unless quality has been clearly specified in writing, there is danger that substitutes may be offered. Not uncommonly, new producers underbid competitors, not because their costs are lower, but because they do not know how much it costs them to produce goods. Sometimes, also, low bids are made by strong concerns with a view to crushing competition, after which the buyer may be at the mercy of the seller. It is well, therefore, in connection with all purchases to bear in mind the fact that "bargains" are not always what they seem. On the other hand, particularly in the merchandising business, it is frequently possible to pick up "distress" lots of goods thrown on the market at great sacrifice as a result of the seller's financial necessities.

FROM HOW MANY SOURCES SHALL PURCHASES BE MADE?

Sometimes the question becomes highly important as to whether a concern should purchase from only one source of supply or from several different sources. No dogmatic answer can be given, since the decision will depend upon numerous factors applying in particular cases. In favor of purchasing from a single source or from very few, such arguments as the following may be urged: (*a*) credit will probably be more readily and generously extended in cases of need; (*b*) service may be sure and more continuous because of the friendly relations developed between buyer and seller.

On the other hand, if only restricted sources are depended upon, it is possible that the buyer will not secure the benefit of the lower prices which might result from having a number of sellers competing for his business. Further, there are circumstances in which the buyer who adheres closely to one selling house may put himself too much in the power of the seller, so that his bargaining position will be lost. Also, there is always the possibility that a *single* source of supply may be cut off.

There is, of course, another side to this question. If the buyer is powerful he may contract for the entire output of the seller, under which circumstances the tables are turned, and the seller of goods may find himself completely at the mercy of the buyer. Cases have arisen when a purchaser has been able in this manner to exact most unreasonable terms after the seller's organization had been developed solely with a view to supplying goods through the single channel. In general, however, it certainly pays any buyer in the long run at least to keep in touch with several different sources of supply. Thus better prices will probably be secured, and the buyer will be insured against possible interruptions in service not infrequently resulting when only one channel is open to him.

Even though present sources of supply may seem wholly adequate and even though the quality is perfectly satisfactory, it is a wise policy to be constantly on the look-out for *alternative sources*. The larger companies should always be searching

for possible substitute commodities which may be utilized with an equal or greater degree of advantage than the goods now being purchased. This policy is not only a means of insurance against unforeseen curtailment of the present sources of supply, but it frequently leads to an enormous saving in the cost of goods produced. In this connection the words of Mr. Eastman, with reference to difficulties which his great company encountered in the earlier days as a result of an unexpected curtailment of the source of supply of one of their most important materials, are well worth remembering:

> "One of the biggest things I have learned in business, one of the controlling policies of my life, is this: the moment you have found out that you can do a thing in one way and that this one way depends for its success upon outside factors which you cannot control, then immediately start to devise some other way, so that no set of circumstances can leave you helpless. I learned that lesson in all bitterness, but it is also a lesson for others."

CONTROLLING THE SOURCE OF SUPPLY—INTEGRATION

For the larger companies another very important question relating to the purchasing policy has to do with the possible control of the sources of supply of the raw material or fashioned products most commonly needed. The question may well be raised as to whether it is desirable for a company to attempt through the development of subsidiaries, or otherwise, to control its entire supply or only a portion of the supply. In certain instances a company may be confronted with the problem of *making* all of its finished goods or making only a portion and buying the remainder. The proper solution of such problems is a very vital matter to many companies. It is necessary to distinguish in this matter between the occasional policy, the emergency policy, and the normal or long run policy.

The larger the company, the more likelihood there is that attempts will be made to control the sources of supply, either wholly or in part. Well-known examples of such "integration" are furnished by the United States Steel Corporation and the Ford Motor Company. In fact, the policy has been to a certain degree developed by nearly every powerful corporation.

Under the following conditions, some degree of control of the sources of supply *may* be desirable:

1. As a rule, only when the user has a continuous and predictable demand for a given commodity, and when the article is relatively important in the company's operations. 2. When the commodity needed is difficult to obtain under satisfactory conditions as to quality, quantity, and time of delivery. 3. When special or intricate types of goods are needed, which it is difficult for others to make according to specification. 4. When the accessory industry is backward and operating under unnecessarily high costs. 5. When the article needed is of such a character that it may readily become subject to monopoly control, with the possibility of arbitrary increases in price. 6. When there is a real danger of serious interruption of service and loss of money and good will if deliveries are delayed. 7. It is also important to determine whether the company exercising control uses enough of the material to permit the development of a producing unit of the right economic size, or whether it will be necessary to sell part of the product to others. Frequently it has been found advantageous to control only a portion of one's source of supply.

On the other hand, a company which attempts to branch out too far in this direction may find its fixed investment increasing beyond all safe limits. There may also result a division or scattering of interests which will further weaken the company from the financial and administrative point of view. In general, it is a question whether the average business is justified in attempting to develop an independent source of supply for its materials unless the possible sources are much restricted and their control would therefore give to the company a real monopoly advantage.

Perhaps one of the most interesting cases of the control of the main source of supply is that met with in the Bell Telephone System. The American Telephone and Telegraph Company owns its great manufacturing subsidiary, the Western Electric Company, which until recently did not confine its selling operations to the Bell telephone companies. Likewise,

these companies are under no obligation to purchase from the Western Electric Company unless its prices and service are more favorable than can be secured elsewhere. On account of the vast scope of this organization it may be of interest to quote from the latest annual report of the American Telephone and Telegraph Company. President Thayer's statement regarding the relations existing between the Western Electric Company and the parent organization is as follows:

"In the very beginning of the business of giving telephone service—over 40 years ago—it was foreseen by the management that in connection with the use of the telephone there would be developed many varieties of auxiliary and related apparatus and that unless this development was controlled these necessary devices would be likely to be produced by different manufacturers and patented by them, leaving the operating telephone companies in time at their mercy. To avert this danger, and as stated in the annual report of 1882 'to insure the highest standards,' a combination was arranged of some of the manufacturers of that time into what became the Western Electric Company, of which The American Bell Telephone Company, our predecessor company, owned the control; and going beyond this, a contract was made between the companies through which the control of patents, present and future, was vested in The American Bell Telephone Company. The contract also specified that the manufacturing company should sell to all licensees (the Associated Companies) at uniform prices which should not be unreasonable.

"There was no requirement of the Associated Companies that they should buy anything of the Western Electric Company, so that what was accomplished was to make the manufacturing company depend upon the operating companies rather than to make the operating companies depend upon the manufacturing company.

"Starting from that beginning the Western Electric Company gradually became the manufacturer of nearly all of the apparatus required in the Bell System. That fundamental work has been of inestimable value in the development of the Bell System. Out of it have grown the advantages foreseen and others equally valuable unforeseen. The closest cooperation through more than a generation has made the Western Electric Company virtually a department of the Bell System exercising the function of manufacturer, purchasing agent and storekeeper. Its compensations have been fixed on the basis of reasonable but steady return on investment rather than that of the high but fluctuating profit on the sales of an uncontrolled manufacturer. No public utility has paid less proportionately in profits to the manufacturers of its equipment and such profits

as have been paid, through our stock ownership, remain in the Bell System for the advancement of the utility. Volume of sales and profits therefrom, the goal of most manufacturers, were of secondary importance, while the needs of the service became the predominant factor in working out the solution of the problems which confronted the Bell System. The telephone users have been materially benefited by this arrangement.

"A large telephone central office well designed is housed in a building planned to fit the switchboard. The switchboard itself is a complicated and expensive apparatus requiring two or three years for its manufacture and installation. It must be capable of extension and of operation in connection with other similar switchboards. To a greater or less extent this is true of all of the apparatus going into our service. The advantage of a control, in the interest of economy in construction and operation, over the patent rights and prices of the manufacturer must be apparent.

"Furthermore there is the advantage of control over production. The manufactures of the Western Electric Company are designed for our requirements with a view to the greatest economies in construction of plant and in maintenance and operation. They are produced in quantities we specify in fire-proof buildings where every precaution is taken to insure continuity of production. They are of uniform standards so that the cost of maintenance and repairs is at a minimum.

"The relation which has grown out of the contract and financial interest established in 1882 has therefore provided for the Bell Telephone System a controlled source of supply of the apparatus and material needed in the construction, maintenance and operation of its plant.

"The apparatus, designed especially for its requirements, can be specified by our engineers with regard only to efficiency and economy. There is ample protection as to patent rights, prices and continuity of supply.

"The expense of selling is eliminated. The use of apparatus is determined solely by its merit and there is afforded an opportunity for the greatest economy in the routines of purchase and distribution."

In commenting upon this situation, President DuBois of the Western Electric Company in a recent annual report made the following statement:

"It is clearly understood by the directors of your company that on the one hand the responsibility for providing with diligence and promptness whatever equipment and materials the Bell Telephone Companies may order rests on them and that on the other hand those

companies are under no obligation to purchase continuously from your company. At the same time, by reason of the intimate relationship that has existed for many years, your company is able to meet the requirements of the telephone companies both technically and in quantity production as no other manufacturers could do.

"Out of this intimate relationship there has grown by natural stages of evolution, not only manufacturing duty and responsibility, but also a centralized purchasing organization and a widespread distributing system operating now through some 32 warehouses throughout the country.

"Your company's success in the telephone field has not been due to contracts but to a continuous effort to merit the patronage of the telephone companies, and it is the duty of your company's directors to see that such effort is steadily maintained."

BUYING FOR CASH

The terms of sale offered may at times vitally affect the purchasing policy. If a company is much pressed for working capital it will naturally look to those dealers who are willing to extend liberal credit, even though a higher price is charged for the goods. Frequently buyers who are thus situated have little alternative in the matter. They are almost literally compelled to do business with those sellers who will "carry them." This is a most unfortunate situation in which to be placed, and as a rule it is wiser to do less business than to do a large amount of business on credit terms. In most lines cash discounts have been so arranged that the buyer who fails to profit by them can scarcely hope to remain long in the competitive field. There are, of course, times when even a strong company may find it desirable to purchase goods on a time basis rather than to borrow further from its bank. Such a case, however, is very exceptional. The only safe rule to follow, and the only plan which leads to immediate and ultimate profits is to *buy for cash*. The purchaser who can always take the cash discounts, and who is always ready to snap up real "bargains," is the one to whom real bargains will be offered. There is no magnet which so strongly attracts the seller of goods as the magnet of gold. A company with a strong cash position and with ample lines of credit at its bank, other things being equal, can skim the cream from the sellers' market.

HEDGING OPERATIONS

When little time elapses between the purchase of raw material and the sale of the finished commodity, the risk incurred by the purchaser as a result of a drop in prices is not ordinarily a serious one. Also, even though a considerable period should elapse between the time when orders for material are placed and the finished goods are to be delivered, risk would be practically eliminated if the goods were being made to order at a firm price, properly protected by contract.

Trade practises differ, however, and in many cases goods are manufactured before the actual receipt of orders. Whether the producer has already fashioned his goods or is merely holding his raw material until orders are received, makes little difference. Under such circumstances, if prices of raw material should drop before the stock is sold, the manufacturer would naturally be forced to take a loss unless he could in some way protect himself. On the other hand, it not infrequently happens that orders will be secured considerably in advance of the time when the manufacturer finds it convenient to buy the raw materials which will be needed in filling the orders. Under these circumstances as well he will be in danger of incurring a loss, if in the meantime there is a rise in the price of the raw materials which he uses.

In such contingencies as have been mentioned it may be possible for the producer to protect himself by what is known as a *hedging* operation, that is, he may buy or sell *futures* in the raw material which he uses. Let us suppose, for example, that our manufacturer has in stock an adequate supply of materials, and estimates as a result of his past experience that his entire stock can be made up and sold within a certain number of months. Perhaps prices of the finished goods will drop in the meantime. Hence, he may *sell* a "future," that is, make a contract to deliver at a definite future time an amount of raw material equivalent to that which he has in stock. Such "futures" are commonly bought and sold in many of the basic commodity markets where active speculation is carried on. If in the meantime prices drop, his finished goods will probably

sell for a proportionately smaller amount, but the producer will, in turn, be able to buy the raw material to meet his future delivery at a lower price. Therefore, the profit which he makes on the sale of his "future" will perhaps counterbalance his loss on the finished goods.

Likewise, if the manufacturer is "short" of goods, though he has definite contracts to fill, he may *buy* a future covering his probable raw material needs, so that he will be sure to get his material at a price approximating that which he expected to pay when he took the orders. This latter case, however, is less frequent, since a manufacturer who can show his banker "firm" orders will usually have no difficulty in raising sufficient money to cover immediate purchases of raw material.

Speculation of the sort mentioned tends to stabilize prices. It is met with particularly in the cotton industry and in the wheat and flour business, though in some other raw material markets it is possible to make similar arrangements. Obviously there will not always be a close relation between the fluctuations in price of the raw material and the price of the finished product. Much will depend upon the width of the spread between the basic raw material price and the normal price of the finished goods. In other words, if the cost of material constitutes by far the greater part of the selling price of the goods, there may be expected to be a close correlation between the two price fluctuations. Such a condition is found in the flour milling industry in which the cost of material constitutes nearly 93 per cent of the total expenses and about 87 per cent of the value of the product. In this industry the buying and selling of futures is very common. In the manufacture of cotton goods the practise is resorted to with less frequency, though it is probably more common in England than in this country. The English cotton mills are usually more specialized in their operations than are our mills.

As a rule, the nearer a commodity used in manufacture is to the basic raw material, the more violent will probably be the fluctuations in material costs. Also, the more labor and other costs are combined with material costs in turning out the

finished goods, the less violent will normally be the fluctuations in the price of the product. In order to make possible the development of a futures market, a commodity should be extensive in quantity, unmonopolized, capable of definite standardization or "grading," easily recognized as to quality, and relatively non-perishable. There are, accordingly, very definite limitations imposed upon the possibilities of future trading.

CONTRACTS, COMMITMENTS, AND CANCELATIONS

Much might be said on the question as to whether it is a wise policy to contract for deliveries of goods over an extended period of time. Under certain circumstances it may be highly advantageous to enter into such contracts provided they may be in the nature of blanket orders, that is, if the contract calls for delivery of material at different times to suit the convenience of the buyer. Such contracts may save time for the purchaser, and may enable him to obtain a lower price provided he is willing to contract for his entire requirements. Otherwise there may not be much advantage to be gained from the contract. Occasionally, a seller, provided he can be guaranteed a certain minimum of sales, may find it distinctly advantageous to contract for deliveries over a considerable period of time at lower prices than could otherwise be offered, because he will thereby be enabled to distribute his high initial expenses over a much larger number of units of goods sold. This is particularly true when it becomes necessary to set up special machinery or equipment to meet the buyer's peculiar needs.

When long time contracts are entered into it is usually most advantageous in the long run for some kind of a sliding scale arrangement to be made so that neither party will suffer heavily if market prices change substantially. It also frequently happens that contracts can be made which will assure lower prices as the quantity purchased increases. It is, of course, obvious that the seller will wish to protect himself so that he will not be the loser if as a result of rising prices the goods which he contracts to sell will cost him more. On the other hand, the buyer's chief object in entering into a long time contract is to

assure himself of a continuous supply of a particular commodity at a price which he deems advantageous. Unless he can really secure this advantage, therefore, there is obviously no reason why he should make a contract. Penalty clauses of different sorts may be inserted *ad infinitum,* providing for prompt deliveries, maintenance of quality, and other considerations; but in practise it is frequently difficult to enforce these clauses unless the buyer is in a very strong position.

Long time contracts are sometimes made for the purchase of basic materials such as coal, iron, and the like, which are used in great quantities and must be frequently delivered. Before the war period five- and ten-year contracts for such commodities were not uncommon. During the war, as costs and prices rapidly rose, many sellers were subjected to great loss when strict performance of the contract was demanded. Some central electric stations in 1917 as a result of such contracts were buying their coal at less than half the price paid by other companies in the same locality. In the long run, however, it is inadvisable for a buyer, even if it is within his power, to force the performance of a contract which will be ruinous to the seller. With a view to the maintenance of future pleasant and profitable relations reasonable and friendly adjustments should be made.

The subject of contracts naturally suggests the problem of *cancelation.* It is common in many lines of industry to enter into definite commitments for future purchases either through long time contracts or periodic agreements. Many orders are normally placed at a time much in advance of the delivery date. When prices rapidly drop, it is evident that companies which have committed themselves in this way will be subjected to great losses on the high-priced inventory which they are under obligations to purchase at a time when it would be possible to buy the same grade of material on the open market at a much lower figure. There then arises a distinct clash of interests between what seems to be immediate gain and the policy dictated by the highest business ethics.

At the end of 1920 it was reported that at least two billion dollars' worth of merchandise was to be found on piers, in

warehouses, at railroad stations, on cars, and in steamships in the United States, the ownership of which was disputed because of quibbling, attempted cancelations, and actual cancelations. Beyond a doubt the situation was desperate in the extreme. In addition, still greater quantities of goods which were under order, but not yet shipped or perhaps not fully manufactured, were refused by the prospective purchasers. The malady was severe and nation wide. Many a seller found that an order was not legally an order under such circumstances unless there has been a written contract signed by the buyer or his authorized agent. It also appeared, in general, that unless part of the purchase price had been paid or the goods had actually been stored on the buyer's premises, it would be difficult legally to force him to accept delivery.

Some of the common reasons for the cancelation of orders or the refusal of goods already shipped are the following:

(*a*) Slow delivery; (*b*) unsatisfactory quality of goods; (*c*) a realization on the part of the buyer that he is already "overstocked"; (*d*) declining business; (*e*) fear that the public will not continue to buy at prevailing prices; (*f*) revision of production schedules; (*g*) actual financial embarrassment.

These reasons may be present either singly or in combination. Sometimes when orders or commitments are canceled it is impossible to trace any specific cause other than a disregard of obligations and a low standard of business ethics.

No such period had before been passed through in our entire industrial history. Many purchasers felt that it was perfectly justifiable for them to "push" the sellers under the circumstances, because of the treatment which had earlier been accorded to them as buyers. During the period of inflated prices sellers took advantage of buyers by refusing to accept business on a definite price basis, by delaying deliveries, and by accepting orders far in excess of their production capacity. It was but natural, therefore, that the buyer, under circumstances in which he found it decidedly to his advantage to break his agreements, would feel little compunction in so doing. The very

fact that in some lines of industry there has developed in normal times the practise of placing numerous orders with different sellers for the same batch of goods with a view to taking the first lot which could be delivered, leads naturally to a low standard of ethics in the matter of cancelations. Both the seller and buyer of goods are to blame for the development of this practise.

There are many instances when a concern has been confronted with the alternative of canceling its commitments or refusing orders which had actually been shipped, or going into a receiver's hands. The question then becomes a very real one as to whether it is a wise financial policy to abide by one's agreements at the risk of bankruptcy, or to cancel. The problem becomes even more acute when a company sees its competitors canceling their orders so that they will be able to strengthen their current position and buy new goods at the low prices. If under such circumstances a company is too proud or too honorable to follow the crowd, then all that it can do is to throw itself on the mercy of the seller and make some mutually satisfactory adjustment. If the seller is not disposed to be merciful, an appeal must be made to the banker. The banker's action will depend largely upon the character and demonstrated capacity of the unfortunate purchaser, since his capital is already seriously impaired.

At such times there frequently appears to be a very definite clash between the immediate interest of the buyer and his ultimate interest. If bankruptcy stares him in the face he can scarcely convince himself that he has any "long run interest." His chief concern then is to save himself without regard to what may become of the seller who has manufactured goods for him. Provided orders are being generally canceled, as a last resort a company may be justified in refusing to accept orders which have been placed and in taking a chance on the legal outcome of its actions, hoping in the meantime to regain a solvent position. Such a policy can be approved only *as a last resort,* and it is usually possible to make friendly adjustments which will at least divide the burden of falling prices.

COMMERCIAL BRIBERY

The purchasing agent of any company is in a position which lends itself to underhanded practises more readily perhaps than any other in the organization. Unless his standard of ethics is very high he may be influenced by the "bribe." It is in many cases a very easy matter for a purchasing agent to cheat his firm by accepting secret commissions which raise the price of the purchased goods or which lead to the buying of an inferior product. It has commonly been supposed that the days of such low tactics are past. Such, however, does not seem to be the case. If public reports are worthy of credence, it is perfectly possible for employees in strategic positions to prevent the satisfactory use of commodities supplied by concerns which have not given the secret commission. It is also not uncommon for purchasing departments in some of the smaller organizations to expect some kind of a "rake off" on all purchases. The Federal Trade Commission in 1918 submitted a special report to Congress on the matter in which the following statement was made.

> "The Commission has found that commercial bribery of employees is a prevalent and common practise in many industries. These bribes take the form of commissions for alleged services, of money and gratuities, and entertainments of various sorts, and also loans—all intended to influence such employees in the choice of materials. It is evident that this inexcusable added cost is finally passed on to the consumer."

About a third of the states have at present enacted statutes dealing with such practises, and it is probable that a federal law on the subject will soon be enacted by Congress in order to deal with the sellers of goods who tolerate such policies in the case of commodities entering into interstate traffic. This is one of the forms of unfair and criminal competition which the courts should deal with mercilessly.

LARGER ORDERS *versus* SMALLER ORDERS—OVERBUYING

A question which always confronts the new concern and which is of perennial interest to all types of businesses is that

of the *size* of the orders which shall be purchased. Every concern will have to determine for itself what policy is most satisfactory. A few considerations, however, may well be borne in mind.

In favor of the small order such arguments as the following may be advanced. (*a*) By buying "close" and in small lots the investment in stock will be reduced to a minimum. Hence less working capital will be needed. (*b*) Further, there will be less probability of deterioration in the quality of the goods and less opportunity for values to shrink because of changes in fashion or because of a general drop in prices. (*c*) It is obviously easier to finance small purchases than large ones.

On the other hand, there may be definite reasons why comparatively large orders are advisable under certain circumstances. (*a*) The purchasing of larger lots assures the continuity of factory operations and makes it possible to meet unexpected demands. (*b*) Additional discounts are frequently given on large purchases. (*c*) There may be additional economies in freight, cartage, and handling of the larger quantities. (*d*) More liberal purchases may sometimes protect the buyer against a sudden rise in prices.

In weighing the various arguments on either side in a particular instance the significance of stock turnover should be kept constantly in mind. For certain types of goods which turn rapidly a large order might lead to little risk and might tie up capital for only a brief period. However, unless the price saving resulting from the larger purchase more than outweighs the additional expenses incurred through interest on investment, storage, and other charges, evidently the larger purchase should not be made unless reasons other than cost considerations influence the decision. Further, it should be remembered that the most fruitful source of profits arises from the quick turnover of stock, thus making possible a very effective utilization of working capital. For example it would obviously be more profitable to buy ten $100 lots of goods in the course of a year and to make a profit of $10 on each lot than to purchase two $500 lots on each of which a profit of $100 would be made. On first thought the reader might be disposed to disagree

with this statement, since apparently 20 per cent is being made on the investment in the latter case while only 10 per cent is made on each $100 investment in the former. Actually, however, what happens is this. An investment of $100 in goods in the first case has earned a net profit of $100 at the end of the year—a 100 per cent net yield. In the second case an investment of $500 has earned at the end of the year only $200 or 40 per cent. If, however, the capital of $500 has been turned over ten times instead of twice, it would have earned $500 instead of only $200. Obviously, therefore, an investment of $200 in stock which is turned ten times during the year will earn profits equal to that which would have been realized on a $500 stock turned only twice during the year.

No definite rules can be laid down regarding the ideal stock turnover. It may also be noted in passing that a more rapid turnover is sometimes secured only as a result of an unwarranted high selling expense. It is much easier to discuss this question by means of definite formulae in connection with the merchandising business where the problem is comparatively simple. The general principle, however, holds good that it pays to buy for cash, to buy no more than is really needed for immediate purposes, and to turn the stock as rapidly as possible. Thus risks are minimized under normal conditions. Under abnormal conditions and in exceptional cases there may be many reasons which make it impossible or unwise to follow these suggestions in practise, though the principle is absolutely sound and it should be the constant aim to direct policies accordingly. Small investment in stock and quick turnovers have led to the success of most concerns which are today outstanding examples of financial strength.[1]

Excessive purchasing may be due to the fact that a concern has endeavored to carry too many different lines or sizes of goods. When the commodities dealt in are numerous it is a vital problem to determine what proportion of each type can most profitably be carried as well as to discover those articles on which the highest or lowest profits are being realized. On investigation it will frequently be found that many concerns stock themselves heavily with goods which can actually be sold

[1] For further discussion of *turnover* see Chapter XXII, page 646, ff.

only at a loss because of their slow turnover. In the retail business particularly, sizes, styles, colors and other distinguishing features profoundly affect the stock turnover. Hence the retail buyer should investigate these questions with particular care with a view to stocking up only with such goods as can be moved rapidly and at a profit. Here again close cooperation with the selling department is essential though frequently ignored.

It is sufficiently clear that overbuying is one of the worst evils which can befall either a new or an old concern. Yet many a business each year is ruined by such a policy. Some companies are utterly unable to resist what seems to be a bargain, though the common testimony of successful business men is to the effect that bargains do not ordinarily exist in raw materials to such a degree that a concern is in normal times warranted in locking up its capital in excess inventory. The more effective and only sure way to save money in buying is to purchase reasonable quantities under the most favorable market conditions—not to load up with excess quantities. There may be times when *under-buying* must be guarded against—but *this* danger is extremely rare.

It is interesting to note in this connection that in referring to the history of the Ford Motor Company, Mr. Couzens recently said, "The hardest fight we had was against taking advantage of bargains in material." The head of a large rubber company also attributed the early prosperity of his business to the fact that a careful purchasing policy was followed. In view of the later reverses suffered by this same company almost solely as the result of overbuying and overexpansion of fixed assets, it may be worth while to quote the president's own words regarding the earlier policy:

> "Because we had so little money we learned how to buy.
>
> "The company usually had to pay cash because it was so little known and so poor that credit could not properly be extended to it.
>
> "The fact that at the beginning we had to buy our raw material for cash allowed us to pick and choose.
>
> "Because we were small we planned our buying ahead—that is one of the reasons that today we are large."

How unfortunate that in the days of apparent success, the earlier policies were forgotten! One of the best known chain store organizations states its policy to be "to buy frequently and for cash." No inventories are carried in excess of current needs. No chances are taken on the market. The financially strongest cotton mill in the United States owes its prosperity very largely to the fact that it buys light when prices of cotton are at the peak and so is in a position to profit by the lower costs a little later. It is not always possible to forecast future conditions sufficiently to enable such a policy to be followed, nor is it necessarily desirable on all occasions. A conservative course, however, should at all times be pursued.

In times of price uncertainty no greater mistake can be made than to attempt to do all the business which comes one's way. It is frequently most desirable from the financial point of view to turn aside that portion of the business which promises to be only temporary or which can be taken only by incurring risks of an unusual sort. This caution applies particularly to the purchasing program. It may be extremely unwise to attempt to carry sufficient goods to meet all demands. It is well to remember constantly that a profit foregone leaves a business with a much more comfortable feeling than a loss actually incurred. Money saved, or not lost, is money gained. A company is really better off if it fails to make a one-hundred-thousand-dollar profit than if it is subject to a thousand-dollar loss.

The purchasing agent is constantly laboring between two opposing forces. He must paddle his canoe between the Scylla of excess purchases and the Charybdis of interruption of factory operation. All the pressure of the sales force, which usually swings the managerial policy, is brought to bear upon him in such a manner as to encourage or even force a too liberal purchasing policy. His lot is by no means an easy one. The recognition which he receives is rarely commensurate with the responsibilities which are imposed upon him, since mistakes on his part will probably cost the company more money than mistakes made in any other department of the business. The reasons which lead many companies to overbuy may be summed up at this point as follows:

1. Most companies have not developed a proper scheme of "budgeting" which makes it possible definitely to plan the needs of the business and to coordinate the activities of the various departments. The purchasing department either acts under pressure from other departments or functions almost independently of the rest of the organization.

2. The purchasing agent is constantly urged to keep a full stock on hand so that the production program will not fall down. As all fingers are pointed at him if stocks prove insufficient or if there is a temporary delay, it is natural that he decides upon a liberal purchasing policy, if for no other reason than to prevent personal unpleasantness from developing.

3. When business is prosperous and a company is expanding, the general feeling of optimism will usually be sufficient to unbalance a purchasing department which has not been accorded recognition commensurate with its responsibilities.

There is much discussion as to whether a concern is ever justified in speculating in raw materials, that is, should purchases consciously be made far in excess of all immediate needs with a view to making money through the increase in inventory values? Many business men will answer this question with an unequivocal negative. It is very rare indeed that such a chance is worth taking. There are, however, some outstanding examples of companies which have successfully followed this policy, among which may be mentioned the American Radiator Company. There are also a number of very exceptional cases in which a practically insolvent concern has been able to work its way back to a solvent position by the judicious use of such a practise, through the assistance of bankers. The type of industry as well as the period in the business cycle have a direct bearing on the possibility of carrying through such a policy successfully. More important will be the credit position of a company and the importance of the cost of its raw material in influencing the price of the finished product. There are occasionally concerns with full exchequers which may find it profitable to invest some of their reserves in low-priced inventory which they may be in a position to use or sell a year or

two later. Such tactics, however, are always to be condemned on general grounds, and speculation in the price of materials beyond a point which is necessary in order to keep the plant in comfortable operation is not a function of the business man.

LOSSES IN BUYING

The various causes of losses in buying have already been indicated in different portions of the chapter. These may be summed up as follows:

1. There is too much careless buying resulting from the failure to study fundamental economic conditions and price trends as well as from a lack of understanding of the needs of the particular industry. The tendency has been to take far too much for granted. As a result (*a*) business concerns frequently buy at the wrong time, buying on the dear market and selling on the cheap market, and (*b*) they often carry too great quantities of inventory.

2. It is common among the smaller concerns to deal largely through middlemen even when it might be possible to buy more cheaply direct. Continued losses frequently result from this practise. On the other hand there may under some conditions be better assurance of an uninterrupted supply if the middleman is patronized.

3. Further losses result from too great dependence upon one source of supply or one type of material. The well-managed company should constantly be on the alert for alternative materials as well as alternative sources of supply.

4. Many companies have lost an enormous amount because of the failure to "standardize" their purchases. Too many different types of goods have been carried in the inventory with the result that a very large proportion of working capital has been permanently invested for unprofitable purposes.

5. Speculation in materials, whether premeditated or merely the result of bad judgment, is a frequent cause of loss.

6. Overbuying has wrecked more concerns than could ever be saved by the most efficient production methods. Since the

larger percentage of current assets is normally in the form of inventory it is obvious that the quickest way to tie up a company's working capital is to carry too large an amount of materials in stock.

7. Losses also arise through dishonesty and commercial bribery which if common in a given industry are passed on to the consumer, but which will otherwise decrease the profits of the individual concern. It is probable, however, that competition in itself has measurably adjusted the evils of this situation.

The small or medium-sized business organization frequently has some advantage over the larger concern in its purchasing methods due to the fact that the purchasing function in such cases is normally performed by the chief executive officer of the business. When, however, the sales manager is also the purchasing agent as is not infrequently the case in retailing establishments, there is considerable danger that he may lose his balance at times when goods are selling with little effort. However, as previously stated, the purchasing problems of the distributing concern are relatively somewhat simpler than those of the manufacturing business, though probably less skill has been displayed in meeting these problems.

Finally, the fact should again be emphasized that in many respects the purchasing department of a business is its most vital part. Errors made at this point can scarcely be rectified at later stages. No process is easier than to "buy a concern into bankruptcy." Too much attention, therefore, cannot be given to the personnel of the purchasing department if the finances of a business are to prosper. The head of this department must frequently know more about the business in all its details than any other man in the organization, and his knowledge must also extend in an intimate way to other concerns. He can, however, by the wise use of his office and his restraining influence, not only make money for the organization through his profitable buying, but also through the careful prevention of waste in the utilization of those stocks of material which are under his supervision.

CHAPTER XX

FINANCIAL ASPECTS OF PRODUCING GOODS

Importance of the cost problem—Influence of the Business Cycle—Cost accounting and business finance—Standard costs—Costs in the retail business—Classification of expenses in manufacturing enterprises—Reducing costs—Standardization and its benefits—Utilization of by-products—Improving the load factor—Reducing costs through the elimination of waste—The Hoover report—Responsibilities of management greater than the responsibilities of labor.

ABRUPT decreases in the selling price of commodities have within the last two years forced many producers for the first time to think seriously regarding their costs of production and the relation of those costs to changes in general business conditions. Many a concern which was apparently making high profits during the period of rapidly increasing prices is now hardest hit by the general business depression. In fact, financial statistics indicate that as a rule those businesses which seemed to be making the largest profits in the period of prosperity are suffering the greatest losses during the period of depression. This condition is largely accounted for by the unwarranted expansion of plant and the multiplication of managerial expenses of all sorts. Fixed charges having been markedly increased while business was booming, it is frequently extremely difficult or absolutely impossible to reduce these charges when the trade falls away. A very large number of enterprises have, inside of two years, not only disgorged all of their war profits, but have also written off all of their surplus accounts, and many have gone all the way into bankruptcy. Many a concern appeared to be enjoying high profits until it failed!

On the other hand there are some examples of conservatively managed undertakings which were quite content during the days of inflated prices to restrict their sales, to conserve their cash resources, to avoid increasing their fixed investment, and

to let competitors have a full share of the abnormal war-time trade. Concerns of this type made little more than average profits when prices were rapidly rising, and have as a rule suffered relatively few losses as a result of the decline in prices.

INFLUENCE OF THE BUSINESS CYCLE

While there are certain clearly defined and fundamental principles which should guide every business which is to be conducted at a profit, not all types of business can safely follow the same financial policies at a given time. Nor can a given concern safely follow the same course at all times. Financial policies must be adjusted in accordance with the trend of business conditions and in accordance with the relative importance of the various factors entering into the cost of production for particular industries. For example, a business whose chief item of expense is labor might at the present time be in a far worse financial position than another business in which the chief item of expense is *material.* The wages of labor have tended to remain high while many materials, particularly raw materials, have fallen abruptly in price. These varying situations which must be faced by different concerns at the same time, and by the same concern at different times, should be carefully considered when financial policies are planned.

It is well to bear in mind the fact that producers' goods generally rise more rapidly and more extensively in price than consumers' goods. Also the price of raw materials usually rises or falls much more rapidly than the price of finished products. The larger the proportion of expense other than material costs entering into the cost of the finished commodity, the less violent will probably be its fluctuations in price. Further, long time interest rates lag behind bank discount rates in the general price movement, and the wages of labor usually lag behind the cost of material, particularly when prices are falling.

In general, *supplementary* costs, that is, those costs which do not enter *directly* into the production of a particular commodity, rise and fall more slowly than the *prime* costs of production—the direct outlays for labor and materials. Also, not

all direct costs move at an equal pace for the different types of industry.

It is, therefore, almost impossible without accurate knowledge of costs and careful planning of finance for a business to know what policy can be most profitably followed at a given time. Usually the general spirit of optimism prevailing at the height of prosperity results in over-investment and the consequent incurring of long time interest obligations at a high rate just at the time when proper planning would call for a drastic reduction of all fixed charges. The general administration and overhead expenses are very stubborn items to deal with when selling prices are reduced.

Perhaps the index numbers of prices which are presented in the accompanying table (Table 44) will serve to indicate in a very imperfect way the irregular variations in prices depending upon the type of material and its stage in the production cycle. Certain indices of wages are also included. It will also be helpful in this connection to study Table 47 showing the relative importance of the different production expenses in the leading industries of the United States.

TABLE 44

RELATIVE COSTS PER PAIR OF SHOES, 1914-1918 [1]

(1914 costs = 100)

	1914	1915	1916	1917	1918
Leather	100	102	125	191	186
Other materials	100	120	120	153	169
Labor	100	102	106	118	134
Selling price	100	103	121	152	169

Table 44 is based on the Federal Trade Commission "Report" on the leather and shoe industries and includes 76 different styles in each year. The figures were obtained from 13 different factories. In 1914 the average cost of leather in the types of shoes studied was 51.1 per cent of the selling price,

[1] The data in Table 44 were presented in the above form by Professor M. T. Copeland in an article appearing in the *Review of Economic Statistics* for October, 1921.

the cost of other material was 9.1 per cent, while labor costs amounted to 18.7 per cent. In 1918 the proportions shifted so that leather cost 54.9 per cent, other materials 9.7 per cent, and labor only 14.6 per cent of the selling price.[1]

[1] The following tabulation which is based on data submitted to the President's Unemployment Conference shows relative price conditions as of the middle of 1921. The maladjustment between the prices of raw materials, of the finished products, and of labor are very clearly indicated.

PRICE CHANGES SINCE 1913 (1913 = 100)*

COST OF LIVING	
Department of Labor (May survey)	180
National Industrial Conference Board	165
Average price to producer, farm crops	109
Average price to producer, live stock	113
Average wholesale price, foods	152
Average retail price, foods	155
WHEAT AND FLOUR	
Wheat, average to producer	128
Flour, wholesale, United States average	173
Bread, retail, United States average	173
Freight rate flour, Minneapolis to New York, domestic	187
LIVE STOCK AND MEATS	
Pork—	
Hogs to producer	116
Wholesale ham at Chicago	166
Retail ham	197
Wholesale bacon, rough side	102
Retail sliced bacon	162
Wholesale short side	108
Wholesale pork chops	184
Retail pork chops	181
Retail lard	115
Beef—	
Cattle, average to producer	91
Wholesale carcass beef at Chicago	124
Retail, sirloin steak	157
Retail, round	160
Retail, rib roast	147
Retail, chuck roast	130
Retail, plate beef	112
Wages in meat packing (Department of Labor investigation)	186
Freight rates, dressed beef, Chicago to New York	214
HIDES AND LEATHERS	
Hides, green salted, packers, heavy native steers (Chicago)	76
Hides, calfskin No. 1, country, 8 to 15 pounds (Chicago)	86

(Footnote continued on next page.)

* These figures first appeared in the *Annalist* for October 17, 1921.

COST ACCOUNTING AND BUSINESS FINANCE

Obviously no company can be in a position to plan its finances successfully unless it has some definite means of knowing the actual costs of producing the various types of goods turned out. A very large proportion of the financial

Leather, sole, hemlock, middle No. 1 (Boston)	120
Leather, chrome, calf, dull or bright, "B" grades (Boston)	195
Wholesale boots and shoes, men's vici calf, blucher Campella (Brockton)	225
Freight rate shoes, Lynn, Mass., to Chicago	210
Wage scales in shoe industry (Massachusetts), about	200
COTTON	
To producer	105
Yarns, carded, white, Northern mule, spun, 22 cones (Boston)	107
Wholesale sheeting, brown 4/4 ware, shoals L. L. (New York)	118
Wholesale printcloth 27 inches, 64x60, 7.60 yards to pound (Boston)	137
WOOL	
To producer	92
Wholesale worsted yarns 2/32, crossbred stock white in skein (Philadelphia)	148
Wholesale women's dress goods, storm serge, all wool, double warp, 50 inches, (New York)	157
Wholesale suitings, wool-dyed blue, 55-56, 16 ounces, Middlesex (Boston)	183
Freight rate clothing, New York to Chicago	210
Wage scale in mills, about	200
BUILDING AND CONSTRUCTION	
Prices—	
Lumber, average southern pine and Douglas fir (at the mill)	128
Brick, average common, New York and Chicago	199
Cement, Portland, net, without bags to trade f. o. b. plank (Buffington, Ind.)	175
Freight rates—	
Brick, common, Brazil, Ind., to Cleveland, Ohio	204
Cement, Universal, Pa., to New York	179
BUILDING LABOR	
Union scale, simple average, 15 occupations	190
Union scale, weighted average, 8 occupations, frame houses (three)	197
Union scale, weighted average, 8 occupations, brick houses (three)	193
Common labor	130
Construction costs: Cement buildings (Aberthaw Construction Company)	161
Coal—	
Price, bituminous, Pittsburgh	186
Price, anthracite, New York tidewater	198
Union wage scales about	173
Nonunion scale, about	136
Freight rates	187—209
Metal trades, union wage scale: Simple average, 19 occupations	218

losses suffered by industrial concerns is due to their failure to keep a dependable record of costs. Without such data as a basis to work from, no scientific planning can be accomplished —all operations must be based largely on "guess."

In spite of the tremendous importance of proper cost accounting as an aid to business success, it was estimated ten years ago that probably not more than 10 per cent of the business concerns in the United States had installed satisfactory cost systems so that they actually knew what it cost them to produce goods. An additional 40 per cent were basing their calculations largely upon estimates, while at least 50 per cent probably used no method of cost keeping whatever, and were really wholly ignorant of their actual costs or profits. Before competition had become so keen and while there was a wide margin between the cost of goods and the selling price, such a state of affairs was not so serious as at the present time. As the scale of operations has grown larger, however, so that direct personal supervision of all details is no longer possible, there is a more evident need for the use of proper cost systems for the purposes of administrative control. Much of the unsuccessful conduct of business is directly caused by ignorance on the part of manufacturers or distributors themselves, who sell goods at unprofitable prices or fail to save in the expenses of operation because they do not know what it costs them to do business per

METALS	
Prices—	
Pig iron, foundry No. 2 Northern (Pittsburgh)	137
Pig iron, Bessemer	128
Steel billets, Bessemer (Pittsburgh)	115
Copper, ingots electrolytic, early delivery, New York	75
Lead, pig, desilverized, for early delivery, New York	100
Zinc, pig (spelter), Western, early delivery, New York	80
Day labor, scale United States Steel Corporation	150
PRINTING AND PUBLISHING	
Book and job, union wage scale	194
Newspaper, union wage scale	157
Railroad, average receipts per ton-mile	177
Bureau Railway Economies estimate of railway wage based on average annual compensation, third quarter	226
General estimate all union wage scales by Professor Wolman	189

Note—The wage indexes refer mostly to wage scales, not the earnings which necessarily also depend upon regularity of employment.

unit of goods sold. As previously stated over 43 per cent of all business corporations in the United States operated at a loss in 1926, while it is probable that a very much larger percentage of unincorporated enterprises made no profits. Obviously, therefore, since the aim of all business is to earn a profit, too much attention cannot be given to proper costing methods. No concern can know how to save waste and plan its operations effectively until it is in a position to determine the sources of loss.

It does not fall within the province of the present volume to discuss in detail any of the problems or methods of cost accounting. It may be stated, however, that the benefits of any adequate cost system will be realized along such lines as follows:

(*a*) It will enable the company to determine what articles should be produced. (*b*) Further, a cost system will make it possible to know in what quantities goods can profitably be made. (*c*) Again, the data will show not merely what it costs to produce each unit of goods, but there will also be an opportunity to study costs comparatively both within and without the organization with a view to determining what the production of an item *should cost*. (*d*) Finally, such calculations as are suggested will make it possible to decide upon a proper selling price.

It is perhaps most important of all for a producer to know whether he *ought* to make certain goods. Many businesses have recently found, frequently too late to save them from bankruptcy, that there is a wide difference between volume of business and profits. Frequently the chief energies of a plant have been devoted to making articles which were being sold at a loss. One of the largest companies manufacturing automobile and similar accessories some two or three years ago discovered that its large business had been built up by only a very few profitable lines, the net earnings from which had made it possible to continue selling a great number of other articles at a very decided loss. In fact, factory after factory had for a long time been producing goods at a loss. Finally, when prices became uncertain, the inevitable result was a receivership, though the volume of sales was greater than ever before.

Ignorant competition due to the lack of knowledge of accounting, and the consequent cutting of prices, has been responsible for many failures in recent years, particularly among the "war babies."

There is a considerable difference between the cost problems of those concerns which make goods to order and those which manufacture largely for stock. The former tend to specialize on quality goods and specialty products of different sorts, while the latter turn more largely to standard goods and mass production. When goods are made to order it is particularly important to know how large an order of a particular type of goods can profitably be put through the factory. Otherwise no proper basis can be used on which to estimate the proper selling price. The knowledge gained from cost accounting studies in this connection will enable a concern to determine whether deliveries must be delayed until orders accumulate or whether it is more advantageous to buy some of their products than to manufacture everything themselves. Many highly interesting and important problems center around this question of the "economical run" of a factory. Evidently there are times when orders must be refused because they are not large enough to be profitable, though it is quite possible that in the aggregate a company might make money even though a considerable proportion of such unprofitable orders were filled.

A mere cost accounting system will not in itself help a business to make money. The system is only a means to an end, and must be combined with intelligent application and careful planning. With such planning, however, the adoption of a proper accounting system will aid in reducing the capital, material, labor, and time used in the production of goods, and will help to bring about maximum utilization of plant, all of which gains will naturally serve to reduce the unit costs of the business.

STANDARD COSTS

Because of the lack of uniformity and standardization, and the total absence of any adequate cost system in so large a proportion of business concerns, it is rather difficult to make

a comparative study of costs in various lines of business. More attention has been given to the matter of operating expenses in trading enterprises than in manufacturing concerns. Through the various trade associations as well as through such research organizations as the Harvard Bureau of Business Research,

TABLE 45

Common Operating Expenses in Retail Stores (1923)

Class of Expense	Jewelry		Automobile Tire and Accessory		Shoe		Grocery		Drug (1919)		Hardware Stores (1924)		Department Stores	
	% Net Sales	% Gross Profit Margin	% Net Sales	% Gross Profit Margin	% Net Sales	% Gross Profit Margin	% Net Sales	% Gross Profit Margin	% Net Sales	% Gross Profit Margin	% Net Sales	% Gross Profit Margin	% Net Sales	% Gross Profit Margin
Number of stores	290		88		499		471		187		1,267		163	
Total salaries and wages	17.1	44.6	12.5	51.2	14.7	50.5	10.6	55.5	15.6	45.9	11.95	48.1	15.4	48.1
Advertising	2.8	7.3	1.0	4.1	2.2	7.6	0.3	1.6	0.7	2.1	0.85	3.4	2.9	9.1
Boxes and wrappings	1.1	2.9	?	?	0.2	0.7	0.6	3.1	?	?	?	?	?	?
Delivery	0.35	0.9	0.8	3.3	0.25	0.9	1.2	6.3	0.1	0.3	1.3	5.2	?	?
Office supplies and postage	0.6	1.6	0.4	1.6	0.4	1.4	0.15	0.8	0.3	0.9	0.4	1.5	?	?
Rent	4.5	11.7	2.8	11.5	3.5	12.0	1.3	6.8	2.8	8.2	2.5	10.1	2.8	8.8
Heat, light, and power	0.85	2.2	0.4	1.6	0.6	2.1	0.3	1.6	0.8	2.4	0.5	1.9	?	?
Taxes	1.0	2.6	0.2	0.8	0.5	1.7	0.2	1.0	0.4	1.2	0.7	2.9	0.5	1.6
Insurance	0.6	1.6	0.5	2.0	0.5	1.7	0.15	0.8	0.4	1.2	0.5	2.1	0.35	1.1
Repairs of store equipment	0.25	0.7	0.2	0.8	0.2	0.7	0.1	0.5	0.2	0.6	0.1	0.4	?	?
Depreciation of equipment	0.75	2.0	0.4	1.6	0.4	1.4	0.3	1.6	0.6	1.8	0.6	2.5	?	?
Total interest	4.6	12.0	1.5	6.1	2.7	9.3	1.0	5.2	3.1	9.1	3.1	12.6	1.8	5.6
Miscellaneous expense	1.5	3.9	1.6	6.6	1.0	3.4	0.7	3.7	1.5	4.4	1.1	4.4	1.0	3.1
Losses from bad debts	0.4	1.0	0.7	2.9	0.2	0.7	0.35	1.8	0.3	0.9	0.8	3.1	0.2	0.6
Total expense	36.4	95.0	23.3	95.5	27.4	94.2	17.3	90.6	27.6	81.2	24.4	98.2	28.4	88.8
Gross profit margin	38.3	100.0	24.4	100.0	29.1	100.0	19.1	100.0	34.0	100.0	24.85	100.0	32.0	100.0
Net profit	1.9	5.0	1.1	4.5	1.7	5.8	1.8	9.4	6.3	18.5	0.44	1.76	3.6	11.2
Stock-turn (times per year)	0.9		4.5		1.9		10.1		2.3		2.28		3.7	

many valuable data have been compiled regarding the costs in various lines of retail and wholesale business. Two interesting tables showing the results of such studies are herewith presented. No comment need be made except to state that the figures must be interpreted as relative rather than absolute, since the data cover only a limited number of cases. Since

percentages instead of actual quantities are given, a study of the proportionate expenses incurred for different items may be enlightening even though the general level of prices has changed.

Naturally the proportions of expense found will vary according to the locality served and the size of the store itself. Though these variations have been worked out statistically, it is not necessary to give more detailed figures in this place. It is worth noting, however, that the working capital needs of the

TABLE 46

COMMON OPERATING EXPENSES IN WHOLESALE BUSINESS (1923)[1]

Class of Expense	Groceries		Dry Goods		Automotive Equipment		Drugs		Electrical Supply Jobbers (1924)*	
	% of Net Sales	% of Gross Margin	% of Net Sales	% of Gross Margin	% of Net Sales	% of Gross Margin	% of Net Sales	% of Gross Margin	% of Net Sales	% of Gross Margin
Number of Firms	501		71		128		117		171	
Total sales force expense	2.6	23.0	5.7	32.4	7.8	31.4	3.6	21.2	4.6	27.7
Advertising	.06	.6	.13	.7	.8	3.2	.15	.9	0.5	3.0
Other selling	.09	.8	.15	.8	.3	1.0	.09	.5	0.1	.6
Wages of receiving and shipping force	1.2	10.6	.8	4.5	1.8	7.2	2.7	15.9	0.8	4.8
Packing cases and wrappings	.05	.5	.13	.7	.2	.8	.27	1.6	0.1	.6
Outward freight, express and truckage	.9	8.0	.16	.9	.5	2.0	.55	3.3	0.6	3.6
Total executive and office salaries	2.0	17.7	2.8	15.9	4.8	19.4	3.4	20.0	3.5	21.1
Office supplies, postage, and stationery	.2	1.8	.26	1.5	.7	2.8	.36	2.1	0.7	4.2
Telephone and telegraph	.07	.6	.05	.3	.25	1.0	.11	.6		
Other buying, management, and office expense	.15	1.3	.45	2.5	.5	2.0	.2	1.2	0.6	3.6
Rent	.5	4.5	.7	4.0	1.2	4.8	.7	4.1	1.0	6.0
Light, heat, and power	.08	.7	.1	.6	.2	.8	.14	.8		
Taxes	.3	2.7	.5	2.8	.4	1.6	.4	2.4	0.6	3.6
Insurance	.15	1.4	.23	1.3	.3	1.2	.2	1.2	†	......
Repairs of equipment	.03	.3	.04	.2	.07	.3	.05	.3	0.1	0.6
Depreciation of equipment	.08	.7	.1	.6	.2	.8	.13	.7		
Total interest	1.5	13.3	2.8	15.9	2.0	8.1	1.9	11.1	0.4	2.4
Miscellaneous expense	.2	1.8	.5	2.8	.7	2.8	.35	2.1	‡	......
Losses from bad debts	.4	3.5	1.0	5.7	.7	2.8	.3	1.8	0.3	1.8
Total expense	10.6	93.8	16.6	94.3	23.4	94.0	15.6	91.8	13.9	83.7
Gross margin	11.3	100.0	17.6	100.0	24.9	100.0	17.0	100.0	16.6	100.0
Net profit	.7	6.2	1.0	5.7	1.5	6.0	1.4	8.2	2.7	16.3
Stock-turn (times per year)	5.9		3.4		3.4		3.9		5.5	

* Confidential sources. † Included under rent.
‡ Included under Other buying, management and office.

[1] Partially arranged from figures collected by Harvard Bureau of Business Research.

different types of retail establishments will vary greatly because of the conditions peculiar to each business. The item of rent, for example, would be unusually high in the operating expenses of a furniture store because of the bulky articles handled. Clerk hire, on the other hand, is naturally much higher in a shoe store, where special individual service must be rendered, than in a grocery store where the clerk's chief function is to wrap up goods as rapidly as possible. The cost of delivery is very high in grocery stores as compared with drug stores. Rentals also will be high in those lines of business in which it is necessary to secure very favorable sites in order to attract the trade.

There are numerous other interesting variations which can be noted from Tables 45 and 46, and it may be finally observed that in those lines in which the turnover of stock is low the total expenses tend to be higher. In such cases there must be a greater "mark up" of the goods in order to enable the seller to make a reasonable net profit on his invested capital. This "net profit," however, will naturally bear a larger proportion to the annual sales because of the smaller basis on which profits are estimated. The retail grocery store with a rapid stock turnover (10.1) makes low net profits (1.8) estimated as a per-cent of net sales. But the capital invested in inventory, for a given sales volume, is relatively less than one-tenth of the amount invested by jewelry stores whose stock turns over only 0.9 times per year. On the basis of stock-turn, therefore, it appears that the net profits of jewelry stores bear a ratio of 1.7 (1.9 x 0.9) to 18.2 (10.1 x 1.8) for retail grocery stores.

For manufacturing enterprises of various sorts a number of highly significant cost studies have been made by the Federal Government. These studies or investigations have been undertaken in connection with tariff legislation and price regulation. Recently the Federal Trade Commission has published valuable reports on costs of operation in such industries as the leather and shoe, newsprint paper, meat packing, flour milling, beet sugar, copper and coal mining. These, however, have frequently applied to a rather limited number of separate concerns. Some of the most useful general data available are now being compiled by the United States Treasury Department

through the office of the Commissioner of Internal Revenue. In a preceding chapter[1] Table 26 was inserted, showing the percentage distribution of corporate income and various expense deductions by industrial groups for the year 1926. This table can be studied with much profit, though the reader should bear in mind the fact that returns for tax purposes will naturally tend to minimize profits and magnify costs.

Table 47, which has been computed from data collected by the Federal Census Bureau as of the year 1919, presents perhaps the most complete data now available relative to the different classes of expense in the leading industries. Naturally these percentage relationships must not be considered absolute. Anyone who is familiar with government statistics knows that the schedules received from so large a number of manufacturing concerns will contain innumerable errors. On the other hand, these errors will tend to counterbalance each other when a sufficiently large sampling is taken. In the present instance the data are based on all the manufacturing concerns of the United States, whether incorporated or unincorporated, and the year 1919 was in most respects a fairly normal year so far as general business conditions were concerned. After the lapse of 8 years the wages of labor in 1927 still claimed about the same proportion of the value of product as in 1919—around 17 per cent. The average wage increased about one-eighth, the output per worker more than one-third, and the horsepower per worker about 45 per cent. Improved processes, also, have led to the use of substitute or wholly new materials as well as to new methods of utilizing the old material, with resulting changes in the proportionate expenditure for materials (56 per cent of value of product in 1927). Lower prices and other influences may also have operated in a measure to invalidate the earlier percentage relations, but, even so, this table is deserving of careful study.

REDUCING COSTS

Since the aim of every business is to make profits, any method of increasing net profits is, from the financial point of view, worthy of consideration. The aim of factory production

[1] Chapter XIV, page 347.

is to turn out the finished product in the briefest possible time with the smallest possible expenditure for material, labor and capital, consistent with the delivery of a thoroughly satisfactory article. All factors in production must be properly coordinated

TABLE 47

The Classification of Expenses in Leading Groups of Manufacturing Industries, 1919

(Amounts in Millions of Dollars)

No.	Industry	Number of Concerns	Capital	Value of Product	Average Value per Plant. Unit: $1,000	Value added by Manufacture	Cost of Materials	Salaries and Wages
	All Industries, 1919	**290,105**	**$44,467**	**$62,418**	**$215**	**$25,042**	**$37,376**	**$13,426**
	All Industries, 1909	**268,491**	**18,428**	**20,672**	**77**	**8,529**	**12,143**	**4,366**
1	Agricultural Implements	521	367	305	585	160	145	89
2	Automobiles	315	1,310	2,388	7,581	809	1,579	379
3	Bakeries	25,095	509	1,152	46	439	713	207
4	Boots and Shoes	1,449	581	1,155	797	440	715	269
5	Brass, Bronze, and Copper	1,092	325	482	441	177	305	118
6	Brick, Tile, and Terra Cotta	2,414	356	208	86	141	67	94
7	Canning and Preserving	4,280	378	628	147	216	413	91
8	Carpets and Rugs	75	119	123	1,640	56	67	29
9	Cars, Steam R. R.	99	335	538	5,434	182	356	92
10	Cement	123	271	175	1,423	96	80	43
11	Chemicals	598	484	439	734	222	216	97
12	Clothing, Men's	5,258	554	1,163	221	557	606	269
13	Clothing, Women's	7,711	391	1,209	157	528	680	254
14	Coke	278	365	317	1,140	92	224	50
15	Confectionery and Ice Cream	6,624	317	637	96	268	369	116
16	Copper, Smelting, and Refining	34	309	651	19,147	67	584	32
17	Cotton Goods	1,288	1,853	2,125	1,650	847	1,278	393
18	Electrical Machinery	1,404	858	998	711	573	425	336
19	Fertilizers	600	312	281	468	96	185	37
20	Flour Mills and Grist Mills	10,708	802	2,052	192	253	1,799	83
21	Foundry and Machine Shops	10,934	2,105	2,289	209	1,341	948	804
22	Furniture	3,154	424	571	181	310	262	185
23	Gas, Artificial	1,022	1,466	329	322	172	158	78
24	Glass	371	216	262	706	171	91	101
25	Iron and Steel	500	2,657	2,829	5,658	1,148	1,681	738
26	Jewelry	2,054	121	204	99	93	110	50
27	Knit Goods	2,050	516	713	348	286	427	158
28	Leather, Tanned	680	671	929	1,366	282	647	108
29	Lumber and Timber	32,568	1,829	2,066	63	1,193	873	711
30	Machine Tools	403	231	212	526	153	59	84
31	Piano and Organs	259	123	113	436	56	57	34
32	Paints and Varnishes	830	240	340	410	123	217	51
33	Paper and Wood Pulp	729	906	788	1,081	321	467	166
34	Petroleum; Refinery	320	1,170	1,633	5,103	385	1,248	116
35	Phonographs, etc.	166	105	159	958	99	60	43
36	Printing and Publishing	17,362	614	924	53	624	300	288
37	Rubber Goods	437	783	987	2,259	461	526	232
38	Ship-building, Steel	162	1,269	1,456	8,988	813	644	696
39	Silk Goods	1,369	533	688	503	300	388	135
40	Slaughtering and Meat Packing	1,304	1,176	4,246	3,256	463	3,783	269
41	Soap	348	212	317	911	78	239	35
42	Sugar Refining, Cane	20	194	731	36,550	69	662	28
43	Tobacco, Cigars, and Cigarettes	9,926	416	774	78	420	353	134
44	Woolen and Worsted	852	832	1,065	1,250	400	666	199

to this end, but viewed from this angle production is primarily a financial problem. Greater losses probably result from the failure to watch the small "leaks" than from mistaken major policies. At this point only the briefest mention can be made

TABLE 47 (*Continued*)

THE CLASSIFICATION OF EXPENSES IN LEADING GROUPS OF MANUFACTURING INDUSTRIES, 1919

(Percentage Relations)

Ratio of Value of Product to Capital	Ratio of Salaries and Wages			Ratio of Cost of Materials			No.
	To Value of Product	To Value Added by Manufacture	To Cost of Materials	To Value of Product	To Value Added by Manufacture	To Salaries and Wages	
140%	22%	54%	36%	60%	149%	278%	
112	21	51	36	59	142	278	
83	29	56	61	48	91	163	1
182	16	47	24	66	195	417	2
226	18	47	29	62	162	344	3
38	23	61	38	62	163	266	4
148	24	67	39	63	172	258	5
58	45	67	140	32	48	71	6
166	14	42	22	66	191	454	7
103	24	52	43	54	120	231	8
161	17	51	26	66	196	387	9
65	25	45	54	44	83	186	10
91	22	44	45	49	97	223	11
210	23	48	44	52	109	225	12
309	21	48	37	56	129	268	13
87	16	54	22	71	244	448	14
201	18	43	31	58	138	318	15
211	5	48	6	90	872	1,825	16
115	18	46	31	60	151	325	17
116	34	59	79	43	74	126	18
90	13	38	20	66	193	500	19
256	4	33	5	88	711	2,168	20
109	35	60	85	41	71	118	21
135	32	60	71	46	84	142	22
22	24	45	49	48	92	203	23
121	38	59	111	35	53	90	24
107	26	64	44	59	146	228	25
169	24	54	46	54	118	220	26
138	22	55	37	60	149	270	27
139	12	38	17	70	229	599	28
113	34	60	81	42	73	123	29
92	40	55	142	28	39	70	30
50	30	61	60	50	102	168	31
142	15	42	24	64	176	425	32
87	21	52	36	59	145	281	33
140	7	30	9	76	324	1,076	34
151	27	43	72	38	61	139	35
150	31	46	96	33	48	104	36
126	24	50	44	53	114	227	37
115	48	86	108	44	79	93	38
129	20	45	35	56	129	287	39
361	6	58	7	89	817	1,406	40
149	11	45	15	75	306	683	41
377	4	41	4	91	959	2,364	42
186	17	32	38	46	84	263	43
128	19	50	30	63	166	335	44

of a few of those general policies which have sometimes been successfully followed in reducing operating costs.

1. *Quantity output* is necessary in order to realize profits in the manufacture of many types of goods. Whenever a standard product is made which because of its nature can sell at a comparatively low price, it has ordinarily been found that mass production is the most profitable. By distributing the overhead expenses and various fixed charges over an enormous number of units, it may be possible to realize high returns in the aggregate though the actual profits per unit sold are small. Low-grade products of wide distribution usually fall in this category and should rarely be produced except on a large scale.

STANDARDIZATION

2. *Specialization* in production has also been found highly advantageous. In most cases a factory should be utilized for the making of that commodity or type of commodity which it can turn out to best advantage. From the point of view of financial efficiency it is desirable to weed out non-profitable lines and to concentrate on those articles which can be produced at a profit. This policy makes for greater simplification and standardization in industry. The higher the degree of specialization, the greater the probability that new processes will be discovered which will result in a still further decrease in costs of production.

The term "standardization" is here used in a broad sense to refer both to standardization in plant operations and in the type of goods produced. Standardization in factory processes normally leads to "simplification" of methods. Standardization in products, on the other hand, will lead to the making of fewer styles, sizes, shapes, colors, and the like. During the war period both government and private agencies carried on a campaign of "standardization," which led in many industries to the elimination of an enormous number of non-standard types of goods, the production of which was from the economic point of view wholly unwarranted.

Some of the advantages to be derived from concentration on

fewer lines of goods and from a greater degree of simplification in production are usefully summed up in the following statement relative to the policy being followed by Deere and Company in their wagon works department. So far as this particular industry is concerned these advantages are claimed as resulting from greater standardization and simplification:[1]

1. THE CONSUMER GAINS FOR THE FOLLOWING REASONS:

(*a*) The cost of implements is reduced from what it otherwise would be. As a result, even though a higher price may be at present paid than formerly, the relative increase in price is less.

(*b*) Better quality is supplied because of the ability of the manufacturers to devote more time to designing, and more expense to manufacturing methods.

(*c*) Better service can be furnished, both on new orders and in making repairs.

2. THE DEALER ALSO GAINS:

(*a*) He secures better service and prompter shipments from the factory, both for new goods and for parts needed for repairs.

(*b*) Less investment in inventory is required since fewer lines need be carried.

(*c*) The depreciation in stock is reduced, and there is a smaller amount of shopworn and obsolete inventory.

(*d*) Requirements for storage space are reduced.

(*e*) There is decreased handling and clerical work.

(*f*) The sales force, concentrating on fewer lines, becomes more effective.

3. THE MANUFACTURER HIMSELF GAINS IN MANY WAYS.

(*a*) There is a large reduction in the amount of inventory which must be carried. This leads to a decrease in working capital requirements.

(*b*) Because of the smaller amount of storage space required, as the business grows, less fixed investment is necessary.

(*c*) Depreciation losses are minimized because of the standardization of product, and the carrying of relatively few lines.

(*d*) The materials needed are more readily secured, and as greater quantities of a given kind of material can be purchased, the cost is lowered.

[1]Adapted from SYSTEM, THE MAGAZINE OF BUSINESS, December, 1921, pages 756-757.

(*e*) There are fewer opportunities for making errors, both in the factory and in shipments; thus clerical work is reduced and time is saved.

(*f*) Because of the concentration on fewer lines a better quality of product can be turned out at a lower cost.

It is well to remember in this connection that there are sometimes very good reasons, other than financial, for making products which cannot be sold at a profit.[1] Sometimes valuable good-will is either gained or *kept* in this manner, so that the sale of standard articles may be increased in connection with the production of a few non-standard and non-profitable articles. Psychological considerations must also be thought of when sweeping claims are made in favor of standardization. In some lines of production, even though standardization might theoretically result in much lower prices and greater profits, it is probable that the customer might be more interested in "variety" and style than in "standardization." The consumer's point of view, and human psychology, must be carefully weighed by any producer who contemplates changing past policies or introducing new standards which are expected to lower costs. While it is true that dealers in goods can frequently educate customers to their own way of thinking, it is also true that human demands are very erratic, and that the methods which might theoretically lead to financial and technical efficiency might in practise result in turning out a product which the market would never absorb.

UTILIZATION OF BY-PRODUCTS

3. One of the most effective methods of reducing costs is to utilize materials which have customarily been thrown away. Many a flourishing industry has been built upon the materials formerly wasted by some other industry. Also there are instances in which the main product can be sold at a much lower price because of the gains arising through the sale of by-products. The meat packers, for example, have frequently claimed that the cost of beef would be very much higher to the

[1] See Chapter XXII for a further discussion of this point.

consumer had it not been for the development of their extensive *by-product* operations. Several years ago (1917) Armour and Company indicated that they were producing three thousand different products, a large proportion of which were the result of the utilization of materials which formerly were thrown away. They explained further that in 1916 they were actually selling the dressed carcass of a beef steer for less than the steer, undressed, cost Armour and Company. This surprising situation was explained by the fact that 44 per cent of the weight of the live animal, lost in the process of dressing and non-edible, was being used in the making of valuable by-products.[1]

From the cost accounting point of view it is a question whether a concern is justified in selling the main product for less than its actual cost. It must be admitted, however, that accounting for by-products has not yet become standardized, though the general rule is that the value of the raw material used in making by-products should be estimated on the basis of what it would cost to purchase such material or on the basis of its probable selling price.

4. Many claims are made for the gains resulting from *integration* of the various industrial processes under one management. It is true that there may in particular instances be a decided reduction in cost of production through the control of raw material needed in manufacture or through the elimination of middlemen whose profits are sometimes large. It is frequently a decided gain for a concern to be self-contained and self-sustained so far as its raw materials are concerned. On the other hand, while certain risks are eliminated by such a development, other risks are frequently incurred, due to the greatly increased investment which such a policy demands. Further, the mere fact that costs of production may thus be reduced for the manufacturer does not necessarily indicate that prices will be reduced to the consumer. Some mention has already been made in the preceding chapter of one phase of

[1] Because of the great importance of the slaughtering and meat packing industry, which in value of product ($3,714,340,000) ranked far ahead of all industries in the United States in 1919, it seems desirable to call attention

(Footnote continued on following page.)

the problem of integration. Further reference will be made to other factors of the problem in the following chapter.

5. In times of falling prices such as we have recently witnessed, much attention is given to the miscellaneous methods whereby costs of operation may be reduced. Among other things, frequent reference is made to the desirability of *increasing the turnover* of stock with a view to setting free more working capital. The recent huge losses in inventory values have

to the following advertisement which appeared in the *New York Times* on December 12, 1916. The significance of by-product industries is clearly pointed out.

Banjo Strings That Reduce the Cost of Beef Steak!

BANJO strings and drum-snares—sandpaper and soap—lubricating oils and pharmaceutical preparations! **What does it mean to your cost of living** that Armour make these and hundreds of other **inedible** products? Consider the matter from another angle. Study the **prices** at which Armour **buys** and **sells**—and study, likewise **what** Armour sells.

Armour pays the producer for a **thousand-pound steer** at the 1916 average of $7.61 per hundredweight, $76.10.

But, **dressed,** this thousand-pound steer weighs only some **five hundred and sixty pounds** which, at the average Armour selling price of $12.12½ for 1916 up to November 1 (the time when these figures were compiled) brings only **$67.90, or $8.20 less than the cost of the live steer!**

No logic is necessary to convince you that neither Armour nor anyone else can sell meat at a **loss**

Nor does Armour sell at a loss. The four hundred and forty pounds of remaining material is all **used**—every **scrap** of it. Yet, the fact remains that, through scientific study which has made possible the **utilization of inedible portions in valuable by-products, the dressed carcass of a beef steer sells for less than the steer cost Armour.**

While this is a fact perfectly susceptible of proof were you able to **watch** the process, probably the way **here** to show you that it is so, is to give you an idea of how **valuable** some of these by-products are

Take pharmaceutical preparations, for example—sold **only** to the drug trade and medical profession. They come from **every** kind of animal—**Pepsin** from the lining of pigs' stomachs. **Pancreatin** from the hog also—**Thyroids** and **Suprarenalin** from sheep (the latter product so scarce that it requires 15,000 animals to make a pound, which sells at $5,000)—**Rennet** from calves—all these and many more, all bringing big prices.

Or consider such items as **Glue, Curled Hair, Bristles, Wool, Hides** and **Pelts, Lubricating Oils, Poultry** and **Stock Feeds, Fertilizers** and many more.

There is no waste in the real sense of the word when you remember that even the tiny hairs inside cows' ears are clipped and saved for the making of superfine brushes, you will understand the truth of this.

Only a large establishment with the Armour facilities for the **scientific utilization of every part of every animal,** could possibly effect these sweeping economies which keep meat prices at **true-value levels,** uninfluenced except by the relation of demand to supply.

Hence, Armour's **bigness** becomes of supreme importance to the National Pocketbook!

For, **by any other method of handling,** you would pay **more** for your meats—not merely a little more but **enough more to pay for** that part which under the small, local slaughter-house system, is not fully utilized.

Convinced of the absolute soundness of this, it cannot be anything but common-sense for **you to insist** that only Armour meats and food products be served on **your** table.

Armour's QUALITY PRODUCTS

ARMOUR AND COMPANY

CHICAGO

doubtless served to emphasize the problem of "turnover." By discovering which lines of goods move most rapidly and by concentrating on these lines, it may be possible to speed up the stock-turn and thus decrease costs. By such concentration of effort it may be possible to purchase goods to greater advantage. It is necessary, however, to set distinct limits to the quantity of inventory which shall be carried, and there is always a possibility that some of the "slow moving" lines really serve to create business for the more rapidly turning stock.

6. The losses resulting from *inefficient labor* and the possibility of reducing costs by increasing the output per laborer or by decreasing wages, is deserving of very serious attention. Aside from the cost of raw material, a larger part of the consumer's dollar goes for the payment of labor than for any other item in the cost of producing goods. For all manufacturing enterprises in 1909, salaries and wages amounted to 23.7 per cent of total expenses and about 21 per cent of the value of the product. In 1919 salaries and wages maintained almost the same proportionate relation to the value of the products sold.

It is, therefore, highly important to follow those policies which will lead to an increased effectiveness of labor per dollar expended in wages. The solution to this particular question, because of the human factors involved, is perhaps the most difficult in the entire industrial field. The aim of every well-managed business should be to follow that policy in dealing with labor, or that method in remunerating labor, which *will reward speed* and *quality* and *penalize waste*. To set a standard which will result in increasing individual wages as the quantity and quality of output is improved and as the waste in the utilization of materials is decreased, is from the financial point of view the policy which should be constantly aimed at. Above all else good-will must be created and kept.

IMPROVING THE "LOAD FACTOR"

7. Because of the fact that machinery is constantly playing a larger part in the industrial processes, the relative amount of capital invested in plant and equipment per employee is rapidly increasing in many lines of industry. It is, therefore,

vitally important to keep this capital "busy" for the greatest possible amount of time during each year. Depreciation, taxes, interest on investment, and most of the general and administrative expenses are just as high, whether or not the plant is being utilized to its fullest possible extent. Financial economy requires that the "investment" be kept actively "working" in the production of goods at all times. Expressed in engineering terms, it is desirable that the *"load factor"* of the business be high. The greatest gains result, other things being equal, as the ratio of average annual output to maximum possible output approaches 100 per cent. No factory, of course, can arrive at a 100 per cent load factor. However, to the extent that seasonal and cyclical fluctuations can be eliminated in the productive program, to that extent costs of operation and the price of the finished goods will be reduced. More careful planning throughout the industrial world will lead to a very marked reduction in cyclical fluctuations. So far as the individual business is concerned, much can be done to eliminate the "seasonal" element. Two possibilities, in particular, suggest themselves:

(*a*) Through advertising and proper "education" of the customer it may be possible to induce buyers to distribute their purchases in such a manner that the influence of the seasonal element will be largely reduced. Sometimes it is necessary and very profitable to offer price reductions in order to attain this end. Wherever the investment in plant is particularly heavy, the gain is increasingly great in selling goods at a price concession when made at "off peak" times. This gain may come not only through the possibility of distributing the general investment and overhead expenses over a larger number of units, but there may even be a reduction in the actual operating costs per unit of goods made as the quantity increases. Such a possibility may sometimes explain the process of "dumping" a commodity at a surprisingly low price in a foreign market. Additional gains come through an increase in the labor efficiency as a result of the decreased "turnover."[1]

[1] For further discussion of this question, see Chapter XXII, p. 657.

(*b*) It is also frequently possible to develop some new line of goods which can be produced by the same equipment during "off season" periods. In fact, many concerns have thus been able to increase their profits, decrease their risks, and keep their plant operating at a high "load factor" throughout the year by the judicious development of such new lines or "side lines." Obviously, when such methods are followed the chief risks incurred are not "fixed investment" risks, but only those connected with current financing for the purchase of materials and the payment of labor. Even these risks are minimized, inasmuch as it is usually possible to proceed cautiously and on a smaller scale until the demands of the market are definitely ascertained.

To generalize from the preceding discussion, costs can be greatly reduced in many lines of industry by improving methods of production through greater standardization and through the adoption of more scientific purchasing policies. More careful planning will make possible the utilization of the plant for a longer period each year. Scientific management may lead to greater effectiveness of labor. Further gains will result from the reduction of waste in the utilization of materials and from a decrease in those expenditures which are usually referred to as "selling expenses."

An interesting survey made about a year ago by the Chamber of Commerce of the United States indicates in a rather interesting manner the various methods of reducing merchandising expenses which were at the time being followed by a large number of typical concerns in the United States. Inasmuch as the chief single item of expense in the trading business is usually the cost of labor, it is not surprising that the chief methods of reducing costs had to do with the question of personnel.

REDUCING COSTS THROUGH THE ELIMINATION OF WASTE

American industry has always been characterized by enormous wastes. Because of the plentifulness of natural resources and the over-abundant supply of raw materials needed in the

productive process, little thought has until recently been given to the possibilities of decreasing costs and reducing prices to the consumer through the avoidance of those wastes which might be easily prevented. Some 15 years ago some intensive attention was given for almost the first time to the possibilities of conserving our natural resources. Not until the war-time emergencies were upon us, however, was much attention given to the general problem of the conservation of man power and

TABLE 48

METHODS USED IN 1921 TO REDUCE MERCHANDISING EXPENSES[1]

Method of Reduction	Reducing Cost		Increasing Cost		Un-changed	Net Average Decrease
	Proportion Reporting	Average Decrease	Proportion Reporting	Average Decrease		
PERSONNEL	*Per Cent*	*Per Cent*	*Per Cent*	*Per Cent*	*Per Cent*	*Per Cent*
By reducing wages......	27.29	16.65	.98	2.00	71.73	4.52
By reducing bonuses or commissions..........	20.04	57.59	.....	.....	79.95	11.54
By reducing number of employees............	58.45	21.35	.98	5.00	40.57	12.43
By reducing hours (part time work)...........	11.60	22.72	.....	.....	88.40	2.63
By increasing working hours................	7.00	11.06	.....	.....	93.00	.77
PUBLICITY						
In advertising space.....	28.10	50.48	9.90	45.56	62.00	9.67
In cheaper mediums.....	4.38	64.18	.98	29.00	94.64	2.53
In circularizing.........	7.21	45.30	11.53	75.88	81.26	*5.48
In other publicity.......	4.83	42.93	3.35	33.37	91.82	.96
SERVICE						
In deliveries............	6.39	29.06	2.02	43.33	91.59	.98
In rest room............	.89	75.00	.53	75.00	98.58	.27
CREDIT						
In volume of credit business................	20.81	29.91	1.80	5.00	77.39	6.13
By shortening time on charge accounts......	14.94	22.64	4.62	46.66	80.44	1.23
Other costs........	38.66	18.61	.30	25.00	61.04	7.12

*Increase.

[1]Based on the experience of 1652 concerns as tabulated by the Domestic Distribution Department of the Chamber of Commerce of the United States. Of the number reporting, 50% were manufacturers, 40% retailers, and 10% wholesalers.

capital by means of a better coordination of effort throughout the various stages in the production of goods.

To be sure, "time studies" were made many years ago with a view to deducing certain principles of scientific management as applied to particular industries, and much benefit has been derived from the application of these principles in specific cases. In many instances, however, "efficiency experts" wholly disregarded the human equation in attempting to apply their principles, with the result that their sweeping claims aroused incredulity if not actual antagonism on the part of many leaders in industry, as well as the bitter opposition of organized labor.

That the management engineer is sometimes inclined to over-rate his own powers may perhaps be indicated by the following statement made by one of the well-known efficiency experts of the United States:[1]

> "To attain the highest efficiency of the atomic energy of the fish, the high mechanical efficiency of the bird, the high lighting efficiency of the firefly, is not an ethical or financial or social problem, but an engineering problem; and to the engineer perforce, rather than to any other, must we look for salvation from our distinctly human ills so grievously and pathetically great."

Whatever the theories may be, there is probably general agreement to the effect that the manifold wastes in industry should be studied and prevented. These wastes may be classified as follows:

(*a*) Wastes in *investment,* resulting from over-development and over-extension of fixed assets, and from the non-utilization or ineffective utilization of the equipment thus provided. (*b*) The wastes of *material,* both at the plant itself and before the raw materials are brought to the factory, is appalling. Billions of dollars annually are wasted in our coal fields, oil fields, metal mines, and forests. (*c*) The annual waste of *man power* is no less appalling, due to unemployment, strikes, frequent labor turnover, disease, accident, and occupational misfits. (*d*) The

[1] Emerson, *Efficiency,* page 5.

waste of *time* through delays, the misapplication of energy, and mutual misunderstanding, is also excessive.

Not only in the manufacturing processes, but even more in the field of distribution the perfectly preventable losses which constantly occur add at a terrific rate to the price of goods which the ultimate consumer must pay. Particularly in the case of food products of all sorts, the losses through breakage, freezing, spoiling and general deterioration amount probably to a billion dollars or more each year, while the American people probably waste by way of the garbage can no less than one billion dollars annually.

The American people have been, are, and perhaps for a long time will be, a nation of wasters. This waste extends all the way from the original source of material to the ultimate consumer. It is probably true that from the efficiency point of view there is something wrong with every industry. Beyond a doubt, some of the greatest fortunes of the future will be built upon the wastage of the present. The surest way for the individual to make money is to save it. Likewise one of the chief sources of profit to an industrial enterprise is to reduce waste of every description to the minimum.

THE HOOVER REPORT

The discussion of this subject may well be concluded by some brief reference to the recent report of the Committee on the Elimination of Waste in Industry of the Federated American Engineering Societies, of which Secretary Hoover was the moving spirit. Surveys were made in the early part of 1921 by a committee of 15 engineers named by Mr. Hoover as president of the organization. The investigation covered typical plants in the following branches of industry:—the building industry (*73*), men's ready-made clothing manufacturing (*9*), boot and shoe manufacturing (*8*), printing (*6*), metal trades (*16*), and textile manufacturing (*13*). Though the number of plants actually visited was very limited, information was in many instances secured from a considerable number of additional concerns, so that the results of the survey are at least

worthy of careful consideration. The committee attributed waste in industry to the following main causes:

1. Low production, caused by faulty management of materials, plant, equipment and men.

2. Interrupted production, caused by idle men, idle plants and idle equipment.

3. Restricted production, intentionally caused by owners, management, or labor.

4. Lost production, caused by ill health, physical defects and industrial accidents.

Without giving details regarding the methods of conducting the survey and without examining specific instances cited in the final report,[1] it is interesting to note that this committee of engineers attributed most of the responsibility for industrial wastes to the management itself rather than to labor or any other cause. Their findings are summed up in the following tabular presentation.

TABLE 49

RESPONSIBILITY FOR WASTE IN PARTICULAR INDUSTRIES

Industry Studied	Responsibility Assayed Against		
	Management	Labor	Outside Contacts (The Public; Trade Relationships; and Other Factors)
Men's Clothing Manufacturing	75%	16%	9%
Building Industry	65%	21%	14%
Printing	63%	28%	9%
Boot and Shoe Manufacturing	73%	11%	16%
Metal Trades	81%	9%	10%
Textile Manufacturing	50%	10%	40%

It is scarcely necessary to comment upon this table. Each one is at liberty to draw his own conclusions. The reader may, however, be interested to note that even the best plants studied

[1] *Waste in Industry*, published by the McGraw-Hill Book Company.

were found to be wasteful to an appreciable degree. The extent of waste even in the best plants is indicated by the following table:

TABLE 50

COMPARISON OF WASTES IN THE AVERAGE PLANT AND IN THE BETTER PLANT

Industry	Points Assayed Against the Best Plant Studied	Points Assayed Against the Average of All Plants Studied	Ratio of Best to Average
Men's Clothing Manufacturing	26.73	63.78	1:2
Building Industry	30.15	53.00	1:1½
Printing	30.50	57.61	1:2
Boot and Shoe Manufacturing	12.50	40.83	1:3
Metal Trades	6.00	28.66	1:4½
Textile Manufacturing	28.00	49.20	1:1½

The Committee in approaching its investigation had in mind no theoretical standard of performance or excellence, and did not indulge in any academic definitions of waste. No attempt was made to consider all economic wastes, nor to measure what actually was found by means of any ultimate or speculative standard. In fact, conclusions were reached on the assumption that "a given practise is not wasteful until a better has been revealed, and that the value of a newer practise or the amount by which it is an improvement over an earlier one can only be determined by units and methods of measurement." Consequently industrial waste was thought of as "that part of the material, time, and human effort expended in production represented by the difference between the average attainments on one hand and performance actually attained on the other." It can thus be seen that industrial losses through waste were being measured in the light of the actual *best* performance attained by the industries under consideration.

In view, therefore, of the Committee's finding of fact, their recommendations are of considerable interest. These recommendations for the elimination of waste in industry may be briefly summed up as follows:

A. The Responsibilities of Management

1. Improvement of organization and effective control through the development of more careful methods of planning.

2. The control of production with a view to shortening the total time of production.

3. A balancing of productive capacity and demand for goods.

4. The development of purchasing schedules.

5. The elimination of cancelations and curtailment of returns.

6. Correlation of production schedules with sales policies.

7. More adequate inspection of factory equipment, material and labor.

8. The constant maintenance of plant and equipment in first-class working condition.

9. The adoption of uniform cost accounting methods.

10. The adoption of equitable methods of wage payment which will ensure a proper relationship between efforts put forth and results achieved.

11. Greater standardization of product.

12. Standardization of materials which will result in fewer kinds, sizes and classes.

13. Standardization of equipment so as to permit the widest interchangeability and maximum usefulness.

14. Standardization of performance so that actual performance can be constantly compared with the standard set up.

15. More careful selecting and maintenance of workers.

16. The prevention of industrial accidents.

17. The extension of industrial research both in the individual plant and by trade associations.

B. The Responsibilities of Labor

1. Labor should cooperate with management in order to *increase* production. To this end the laborer must be taught sound economic principles.

2. Labor should assist in the standardization of work.

3. The rules of labor organizations restricting output should be removed.

4. In order to improve health and reduce accidents, workers must cooperate with the management.

5. In the improvement of industrial relations labor should assist in the work of organization.

C. The Responsibility of Owners

Owners have the duty particularly of assisting in stabilizing production and eliminating waste. Bankers through their position should be able to lend their particular service in this matter.

D. The Responsibilities of the Public

1. In order to eliminate waste there must be widespread public interest resulting from educational campaigns on the subject.

2. There should be some reduction in style changes, and style should be viewed partially at any rate from the standpoint of usefulness and economy.

3. The public can assist by distributing its demand for goods more evenly throughout the year.

4. Through various public organizations cooperation with industry can be encouraged with a view to reducing wastes.

E. The Opportunities of Trade Associations

1. Trade associations would be formed in those industries lacking comprehensive organizations with a view to collecting and making public valuable trade information.

2. These associations should also endeavor to promote industrial standardization.

F. Opportunities for Governmental Assistance

1. A national industrial information service is recommended.
2. The establishment of a national statistical service is also recommended.[1]
3. There should also be a body of principles developed for the adjustment and settlement of labor disputes.
4. A national policy regarding public health is urged.
5. The encouragement of a national program for industrial rehabilitation is suggested.
6. The Government is asked to encourage a nation-wide program of industrial standardization.
7. It is also suggested that there be a revision of federal laws whenever those laws interfere with the stabilization of industry.

G. The Duty of Engineers

"It is peculiarly the duty of the engineers to lend their influence individually and collectively to eliminating waste in industry." Since engineers come in constant contact with every type of industry and thus secure an intimate understanding of industrial problems, they are in a position to render disinterested service along the lines already discussed.

The report thus summarized is at any rate very suggestive, even if in places the recommendations made seem to be rather elusive. Beyond a doubt, much might be gained if improvements could be made along the lines indicated, though it is a question how far some of these recommendations can be worked out in practise as long as human nature remains as it is.

The Division of Simplified Practise of the United States Department of Commerce, as well as the Chamber of Commerce of the United States, has been actively pushing the campaign for Standardization and Simplification. It has been estimated

that annual savings of $300,000,000 have been realized through their efforts. At the middle of 1928 there were 883 trade associations and 9,754 individual firms cooperating with the Government in this movement. As an example of what has been done in various industries, the following reductions in the number of stock items may be of interest:

> Mill supplies, shop equipment, etc., 59 per cent; construction materials, 71 per cent; building materials, fittings, etc., 72 per cent; house furnishings, general supplies, etc., 76 per cent; plumbing supplies, 89 per cent; business documents, 99 per cent.

As an example of what has been accomplished by simplified practise, there is cited the experience of a great shoe business which made a reduction from 3 grades with 2,500 styles each, to 1 grade with 100 styles—almost a 99 per cent elimination —with the following results: there was a decrease of 31 per cent in production costs, 28 per cent in direct overhead, 26 per cent in inventories, and 27 per cent in cost to the consumer. On the other hand, turnover increased 50 per cent, and the quantity of shoes sold increased 22 per cent for women's and 80 per cent for men's.

In dealing with the question of waste in industry, it is easy to underestimate the importance of the fact that no matter how desirable physical "standardization" may be, human beings never can be "standardized," nor is it desirable that they should be. It is also important to remember that frequently the savings resulting from a particular change might sometimes be more than counterbalanced by the increased expenditures along other lines necessitated in order to make the first change effective. When conservation of either human beings or materials "costs" more in actual tangible sacrifice than is gained through present utilization of these same factors in production, the so-called conservation means merely retrogression.

From the financial point of view the constant aim should be to secure the greatest possible satisfactory output with the smallest possible application of the various factors in production. Service, however, should be put before profit, and with *service* as the basis, profits in the long run should be thoroughly satisfactory.

CHAPTER XXI

THE FINANCIAL RESULTS OF SIZE

The meaning of size—Alleged advantages of large size—Large scale production *vs.* large scale management—Financial weakness of combinations—Conditions favoring industrial consolidations—What is the most profitable size?—Factors which limit the profitable size of the industrial unit—The economies of size tested in particular industries—The steel manufacturing industry—The garment manufacturing business—Financial results of size in the central station industry—Conclusions regarding the financial results of size in manufacturing concerns—The condition of balanced returns—The universal law of diminishing returns—Economies of size in trading enterprises—Financial aspects of large scale retail operations—Department stores—Mail order houses—Chain stores.

DURING recent years there has been much talk of mergers and consolidations in various lines of business. Already a number of combinations have been effected in steel, in the tobacco business, coal and oil companies, automobiles, and in metal mining. The consolidation movement has even extended to theaters and stores. There have also been a surprisingly large number of bank and public utility mergers.

In a large number of cases the combination was made with a view to averting financial difficulty. Frequently a concern has been taken over because on account of its embarrassed finances the stronger company found it possible to buy out the controlling interest on a very attractive basis.

The reasons now being alleged for the increased activity along these lines are (*a*) the possibilities of decreasing production costs and (*b*) economies in distribution. Many other claims of advantage are, of course, being made. There is, however, nothing new about the movement or the alleged financial advantages which will result therefrom. Our industrial history shows that both when business is dull following a period of great prosperity and at the height of prosperity, unusual interest develops in "financial" operations of this sort.

It is pertinent, therefore, to give brief attention to the problem of the size of an industry in relation to its financial efficiency. Whether great size has been attained with or without combination it is worth while to inquire whether from the financial point of view the extended operations under a single management have justified themselves. If justified, it is well to inquire the reasons therefor, and an analysis of the situation is even more important when the results have not been satisfactory.

THE MEANING OF SIZE

There is much loose talk regarding the size of business units. Some confuse great size with "combination," and refer to every large enterprise as a "trust." It is well to remember that a business unit can develop into large proportions in a number of different ways, and "size" may have a far different financial significance depending upon the method whereby it was attained as well as upon the character of the integral parts of the developed unit. In general, increased size may be brought about in the following manner:

1. "Size" may mean merely an increase of the individual plant so that from the engineering point of view it becomes a very large productive unit, utilizing large units of machinery and equipment, and carrying on large scale operations.

2. Size may mean not merely or necessarily an increase in the proportions of an individual plant, but rather an increase in the "establishment" or operating unit. Such growth may be attained by one or all of the following methods, perhaps in addition to the growth in actual size of plant.

(*a*) Additional plants may be constructed, the purpose of which is to carry on work similar to that which was being conducted in the original plant. These new units may be constructed either in the same locality or in other places.

(*b*) The increase in size may result through the building of new plants or the extension of the old with a view to "integrating" the business, that is, there may be an attempt to

branch out in such a manner as to bring under the same control two or more separate stages of the particular industry. This integration, which may be effected without any attempt to buy out or consolidate already existing plants, may serve on the one hand to link up the factory operations with the sources of supply of material used, and on the other hand there may be an attempt through integration to control or facilitate distribution of the product.

(*c*) In the third place new plants may be developed in addition to the parent plant either for the purpose of utilizing by-products or for the purpose of carrying on wholly unrelated operations—perhaps in an entirely new field. In the latter case the expansion is sometimes in the nature of an "investment."

3. Finally, the increased size may be the result of combinations with other and already existing enterprises. These combinations are variously referred to as consolidations, mergers, amalgamations, and the like, according to the nature of the combination and the extent to which individual identities are merged or changed as a result of the union effected. Combinations, in turn, may be either (*a*) horizontal, (*b*) vertical (*integration*), or (*c*) a combination of the two preceding. A horizontal combination will presumably mean the uniting under a single management of two or more establishments engaged in the same productive stage of an industry. Such combination may, however, be expanded to cover the control of business units engaged in different types of industry. "Integration" has already been explained above. When large scale combinations are effected, a vertical combination frequently extends from the initial source of supply through all stages to the ultimate consumer.

Since there are so many different methods whereby great size may be attained, either with or without actual consolidation, it is rather futile to make sweeping assertions regarding the causes or financial results of industrial combination or to lay down any definite rules regarding economies of size.

ALLEGED ADVANTAGES OF LARGE SIZE

Much has been written on the question of the advantages and disadvantages of combination, though surprisingly little has been said to the point. A certain class of theorists have sometimes gone to infinite pains in an attempt to picture what financial gains might result from consolidation under static industrial conditions, or on the other hand they have busied themselves by knocking down the men of straw which their imaginations have set up. Further, the alleged advantages of "large scale production" have been by many confused with the supposed advantages of "large scale management." Probably, however, all the gains of the former can be secured without resorting to the latter, nor is it necessarily true that large scale management connotes large scale production with its attendant economies. There may be a horizontal or vertical combination of small scale units.

The more commonly discussed gains claimed for large scale production are such as the following:

1. There will be a saving in dealing with materials. This may result through purchasing and selling in larger quantities

2. There is an opportunity to utilize by-products which would probably be wasted in small scale production.

3. Research and experimentation can be carried on which may lead to important improvements in processes of manufacture, the invention of better machinery, and the like.

4. In large scale production it will be possible to utilize larger and more economic units of equipment. This will result in manifold savings because of the relatively lower investment in machinery, because of the smaller amount of space taken up, and because of the proportionately greater performance of each machine as measured in output.

5. There may be a greater subdivision of labor which will result in more intensive specialization. This will lead to a higher degree of productive efficiency. Further, as the utilization of machinery increases, the seriousness of the labor problem will be reduced.

6. The quality of management may be improved because of the greater systematization which inevitably results as the productive unit is increased.

7. An important saving of time will be realized because of the increased specialization and standardization of methods. The large scale utilization of machinery in itself makes necessary a speeding up all along the line. The application of the principles of "scientific management" thus becomes more possible in the large scale productive unit.

8. Finally, there will be added economies in the distribution of the product, since selling expenses which are normally very high can be distributed over a much larger number of units sold.

Many other claims are made, some of which introduce new conceptions, but most of which are merely variations or subdivisions of the reason already mentioned. To sum up the possible advantages resulting from large scale production, it may be said that they arise from *economies in the utilization of labor, capital,* including material and space, and *time.*

In addition to the foregoing possible advantages of large scale production in certain types of business such claims as the following are commonly made for large scale *management.*[1]

1. There will be a saving in expenses of administration due to the concentration of management in a central office. Also it may be possible to improve the quality of administrative officers since there will be a better opportunity to pick those who are well trained in different units of the organization.

2. Standardized machinery can be developed, which, because of interchangeability of parts, and so forth, will lead to a lowering of the expenses of mechanical operation and a decreasing of the time consumed as a result of accidents.

3. Plant "specialization" can be developed, that is, a given factory in the organization can be devoted to the making of a particular product. In this manner it is assumed that much greater financial efficiency can be attained.

[1] At this point the reader may profitably refer to the discussion of the possible advantages of subsidiary companies in Chapter IV, pp. 81-83.

4. Greater continuity in operations may be secured because of the possibility of distributing orders to different factories in such a manner that unusual congestion can be avoided and plants can be operated at a more even "load" throughout the year.

5. Transportation charges may be saved through the elimination of "cross freights." Presumably orders would be filled from the plants nearest to the consumer.

6. It may be possible through large scale combination to control patents, trade-marks, and secret processes in such a manner as to lead to high financial returns.

7. Through integration the sources of supply may be controlled, or the channels of distribution regulated.

Thus the claims are multiplied for industrial consolidations. Perhaps the most recent summing up of the case was made by the Committee on Trusts of the British Ministry of Reconstruction in 1919. Without further comment the analysis of the Committee's findings is here given.

"Great possibilities of industrial and commercial improvement lie beyond the confines of free competition, and are only to be realized by combination in one or other of its several forms; by informal consultation and cooperation, by formal association or by actual amalgamation. These may be tabulated as follows:

Buying (materials, plant, stores, etc.).

- Assured and steady supply of material.
- Unification of buying departments and staffs.
- Bulk instead of detail purchases.
- Greater opportunity for comparison and selection.
- Cheaper credit and better discounts.
- Standardisation of materials.

Making.

- Standardisation of product.
- Specialisation in product.
- Improvements in plant.
- Use of by-products.

Equalised distribution of work.
Quality.

Selling.

Transport economies.
Unification of selling departments and staffs.
Extension of export trade.
Collective advertising.
Lower costs of distribution, fewer middlemen.

Knowledge.

Interchange of data and experience.
Standardisation and interchange of costings.
Collection and dissemination of trade statistics.
Promotion of scientific and technical research.

"The above are the possibilities of combination, not the necessary accompaniments or the invariable achievements. It should be stated at once that no association among the many hundred existing in the United Kingdom at the present time, and few of the numerous mammoth amalgamations, have come as yet anywhere near realizing them in full."

FINANCIAL WEAKNESS OF COMBINATIONS

Such alleged advantages as the foregoing are no doubt interesting, and in certain instances perhaps many of these possibilities have been or will be realized. The fact remains, however, that a large proportion of the industrial consolidations which have been effected in this country have not met with the financial success that was expected. Earnings realized have rarely been equal to the earnings anticipated as a result of the combination. Frequently the actual net earnings following consolidation have been much less than the aggregate net earnings of the combining units. Innumerable reasons may be given for this disappointing outcome. Different factors are at work in the various individual instances. The more common causes of failure or of the small degree of success of industrial combinations are probably the following:

1. In financing a combination, *expected* earnings have frequently been used as the basis of capitalization. There has thus sometimes resulted an issue of fixed obligations on which interest payments could not be met. Other financial embarrassments have also arisen due to the excessive rewards demanded by the promoters of the combination.

2. Old plants which were perhaps sufficiently satisfactory for their purposes have been scrapped at great loss in order to build large scale units. The business has frequently found it impossible to bear the burden of the greatly increased investment thus resulting.

3. In many instances the new management has proved unequal to the larger tasks imposed by consolidation. The loss of the more direct human touch of the independent plant has resulted in inferior product, waste of material, and loss of good-will on the part of the workers. It is extremely difficult to maintain desirable personal relations between the management and the employees as the scale of operations expands.

4. It is also important to note that even though many of the economies above suggested might be actually realized, yet, in practise, many additional expenses are incurred by the consolidated enterprise, which were unknown to the individual units. There inevitably results a greater need for publicity, legal advice, and the like. Much energy and money must frequently be spent in attempting to maintain the proper public relations through different channels. The organization may become hampered by too much red tape, and may suffer from the inevitable inertia of large bodies. It sometimes seems that whenever an economy is effected through combination, several additional expenses spring up from the roots of the old expense which has been chopped away.

Such are some of the more common disadvantages which frequently tend to make industrial combinations unsuccessful, and through which the advantages of mere "large scale production" are sometimes more than counterbalanced. Probably the human factor is the most important one to be reckoned with.

As the scale of management or operation grows, it is essential that many methods be changed and that the officers expand in their capacity along with the expansion of the business. Unfortunately, however, it seems to be assumed that if certain theoretical physical gains will result from the combination, the human element may be disregarded. No point of view could possibly be more fallacious. Many of the possible gains of combination *as such* may be more safely achieved through the development of a "community of interests" and a higher degree of cooperative action through trade associations.

There are certain conditions which distinctly favor industrial consolidation and under which such combinations may prove successful. The presence of any one or all of these conditions, however, does not by any means *guarantee* that financial success will be achieved. Under the following conditions there is most likelihood of a favorable outcome:

1. When the sources of supply of the raw material most needed are limited and are largely controlled through integration. A unique example of this sort is furnished by the United States Steel Corporation which through its vast organization seems to be able to produce steel at a lower cost per ton than most of the independent competitors.

2. When the product is capable of rather minute standardization, combination may sometimes be effectively carried out. In such cases the aim is "mass production," usually at a low price, without any attempt to cater to individual tastes or to develop specialties.

3. It is true beyond a doubt that combinations or large scale single enterprises are most likely to succeed when comparatively large amounts of capital are used in production along with labor. When the operations of labor can be reduced to narrow routine so that machinery can largely take the place of man power, or when relatively few workers are employed in proportion to the amount of capital invested in the plant, the human factor is minimized to such an extent that standardization and mechanical perfection may result in financial gains.

WHAT IS THE MOST PROFITABLE SIZE?

Our real problem, however, is to discover, if possible, what is the most profitable size of the *single* establishment. While a good deal of attention has been paid to the question of consolidation and its financial results, almost no attempt has been made to discover what *scale* of production will result in the largest returns per unit of capital and labor expended in producing various commodities. In many lines of industry there is doubtless a certain most economical size for the individual plant. It is the function of the engineer to cooperate with the financier in discovering this "best" size. It is important to know when large plant units will be more profitable than small ones.

Without far more intensive study than has ever yet been made, it is scarcely possible to do more than "guess" at the most strategic size of the business unit in many industries. There is obviously a maximum beyond which additional investment yields disproportionately small returns. There is also an investment point below which certain types of enterprise cannot be carried on at all. Between these limits there may be one or several *strategic* points at which highest returns are realized upon the capital invested.

It is pretty commonly asserted, for example, that all the economies of large scale production can be secured in a cotton mill using from 60,000 to 100,000 spindles, provided only medium-grade goods are produced. Apparently a smaller size may be economic for the finer goods or even for the coarser counts. There are even mills being efficiently operated with as low as 5,000 spindles and an investment of probably not more than $100,000. Though these small plants would naturally be unable to realize the superior economies secured by large scale production, yet they may make up for this loss by much saving along other lines. It is also evident that a steel mill, for example, cannot be started without a very great investment ranging from $10,000,000 upward. Judging by the example of the United States Steel Corporation, it is rather difficult to set a maximum limit to profitable investment in the

steel industry. Obviously no other organization could duplicate this company. It is sometimes asserted that a rubber tire factory cannot be profitably operated unless its plant is large enough to turn out about $500,000 worth of product per month under normal price conditions. Some place between this size which would necessitate a probable investment of two million dollars or more, and the larger companies which are capitalized at about one hundred million dollars, lies the most profitable size.

The finer and more specialized the goods produced the smaller ordinarily will be the most profitable size of establishment. Finally, the stage is reached where one or more individuals will be doing merely handicraft work. When style and individuality play no part in maintaining the market for a commodity, there may be a possibility for very large profitable investment in a particular plant since the chief factor in production may be machinery. Yet even in this regard it is impossible to lay down definite rules. Every industry must be considered as a peculiar case.

FACTORS WHICH LIMIT THE PROFITABLE SIZE OF INDUSTRIAL UNIT

Among the factors which exert a definite influence in limiting or determining the size of a particular industrial plant are such as the following:

1. Technical limitations, having to do with engineering considerations, may be determining.

2. In certain instances the availability of material to be utilized will determine the size of plant which can best be constructed.

3. There may be in addition limits imposed by the extent of the particular market available to the producer.

4. The nature and availability of the labor supply will also sometimes limit the size of the plant.

5. It is sometimes claimed that location and transportation facilities will exercise a determining influence. These

factors, however, if important will probably appear in connection with some of those already mentioned.

6. The character of product to be turned out is important. Business men commonly advise one who wishes to launch an enterprise with meager capital to make those lines of goods which require little machinery and much personal skill, or to enter the trading business in which the capital requirements are very low.

7. The limits imposed in securing capital will also exercise a determining influence in specific cases. However, when it is possible to lease machinery or factory buildings, this element may not be of great importance.

With some of the previous considerations in mind, it is perfectly evident that there are many types of enterprise in which only a small amount of capital is needed. Larger investment after a certain rather moderate point would be wasted. Whenever the chief consideration is *personal service* rather than quantity production, this condition obtains. It is absurd, therefore, to contend, as has sometimes been asserted, that industrial development is tending farther and farther away from the small scale enterprise toward a few enormous centrally controlled units. While it is true that the average investment per establishment in many lines of production has consistently increased over a long period of time, this average increase results from the growth of a comparatively small number of very large units, and does not indicate any significant increase in the individual investment of the greater proportion of establishments. There has been, and will be, a place for the comparatively small enterprise in most lines of industry.

In this connection the figures presented in Table 51 may be of particular interest. It will be noted that more than half of the manufacturing concerns of the United States had an annual value of product under $20,000, while 79.5 per cent report total annual sales of less than $100,000 per year. The average capital invested in all separate manufacturing establishments in the United States was $153,700 in 1919.

In 1925, 476,504 trading establishments, both incorporated

TABLE 51

Relative Size of Business Establishments

Manufacturing Concerns (all types of ownership), 1919:—	
Number	290,105
Average sales ("value of product")	$215,200
Average capital invested	$153,700
Concerns with annual value of product less than $5,000	
Number	65,485
Per cent of total number	22.6
Concerns with annual value of product under $20,000	
Number	152,925
Per cent of total number	52.7
Concerns with annual value of product under $100,000	
Number	230,836
Per cent of total number	79.5
Mines, quarries, petroleum and natural-gas industry (all forms of ownership), 1919:—	
Number of separate enterprises	21,997
Average sales ("value of product")	$143,500
Average capital invested	$323,100
Corporations reporting to United States Commissioner of Internal Revenue (1925):—	
1. Manufacturing:—	
Number	88,674
Average receipts per company	$687,000
Average capital invested (estimated)	$570,000
2. Trading:—	
Number	109,588
Average receipts per company	$363,700
Average capital invested (estimated)	$118,600
3. Service, professional, amusement, hotel, etc.:—	
Number	28,981
Average receipts per company	$ 98,000
Average capital invested (estimated)	$104,000
4. Finance, banking, insurance, etc.:—	
Number	115,947
Average receipts per company	$110,000
Average capital invested (estimated)	$235,000
5. Transportation, public utilities, etc.:—	
Number	23,613
Average receipts per company	$504,000
Average capital invested (estimated)	$2,033,000

and individually owned, made income tax returns. In addition, there were probably upwards of 100,000 under the partnership form of management, the identity of which was not revealed. This accounts for a total of close to 600,000, and probably at least an equal number had net earnings so small that they did not report. At any rate, the total number of *retail* establishments is, no doubt, well over 1,000,000. In 11 representative cities the average annual sales of 93,928 retail stores in 1926 was $45,000. Of 79,778 independent stores, about 95 per cent had sales under $100,000 and about 47 per cent under $10,000. For the entire country it is estimated that only 1.5 per cent, or around 20,000 stores, do over $75,000 worth of business per year. The average annual sales per *wholesale* establishment in the same cities was $569,000, and for the entire country it is estimated that only about 20 per cent, or 15,000 stores, sell over $75,000 per annum.

From a study of census reports as well as of the annual statistics of income now being compiled by the Commissioner of Internal Revenue it is possible to form some notion regarding the more common sizes of industrial establishments. In most instances, however, only *average* figures are available.

An examination of Table 3 (page 24) reveals a very significant condition so far as corporate enterprises of all sorts are concerned. When companies are grouped within narrow limits in accordance with the size of their invested capital, it appears that the per cent of net income to invested capital almost steadily decreases as the size of investment increases. More specifically, though there are certain points where the return is apparently "balanced" there is with one unimportant exception a constant decrease in the rate of return on invested capital throughout the first 22 groups, ranging from $500 to $60,000. In the lowest group, which is of course abnormal, the actual net income was 382.75 per cent of the capital invested. This group, however, as well as the following group, may be eliminated because of the relatively small number of reporting companies. After this elimination it appears that those companies reporting an invested capital between $1,000 and $2,000 had a net income in 1919 equal to 88.53 per cent of the in-

vestment. The group ranging in investment from $50,000 to $60,000 numbers 9,702 and reports an average net income equal to 16.63 per cent. From this point the net income appears to be about balanced through the next eight groups until a capital of $300,000 to $400,000 is reached. After this point the returns become about 1 per cent higher and the new level is maintained through the six succeeding groups until an invested capital of $2,000,000 to $3,000,000 is reached. From this latter group, however, the descent is marked through the seven succeeding groups, dropping from 17.12 per cent to 9.87 per cent for concerns having an investment ranging from $30,000,000 to $40,000,000. The next two brackets indicate a slightly higher net income, though differences are not sufficiently marked to lead to any definite conclusions. After the $70,000,000 point has been reached the returns appear to be "balanced" at slightly more than 9 per cent through the four succeeding groups.

No such figures as the foregoing were available until this interesting report was published. While no one would be warranted in drawing conclusions from these figures regarding conditions in a particular industry or business, the principle is obvious that *the rate of return on the capital invested tends to vary inversely with the size of the investment.*

THE ECONOMIES OF SIZE TESTED IN PARTICULAR INDUSTRIES

In order to test this working hypothesis more definitely, the writer has conducted some special studies based upon the data tabulated in the United States Treasury Report on corporate earnings and government revenues for the year 1917. In this report statistics of capital invested, net income, capital stock and other data are given for a miscellaneous assortment of 31,500, out of a total of 55,000 corporations whose net income during the year was in excess of 15 per cent on the capital invested. No attempt was made by the Government to analyze the data presented, and inasmuch as only the more prosperous concerns were listed, it is very obvious that any conclusions drawn will be of the most tentative nature.

On account of the great importance of the steel manufacturing industry it was selected by the writer for purposes of particular study. In this group the financial results of operation of 499 separate companies were tabulated under three separate classifications, (*1*) castings, (*2*) forging and foundry, and (*3*) machine tools. In the garment manufacturing business which differs markedly in so many essential respects from the steel business, 291 separate establishments were studied. In the aggregate, therefore, 790 different companies served as the basis of this little study.

In Table 52 figures have been tabulated for 193 separate concerns which make castings. In accordance with the capital groupings followed, it is clear that the highest returns were earned by the group having less than $10,000 invested, with an average investment of 9.2 thousand dollars and a net income of 85 per cent on the investment. As the investment increases from $10,000 to $200,000 the return is apparently "balanced" between 36 per cent and 40 per cent. When the investment increases from $200,000 to $500,000 a strategic point is apparently reached with a net income of 48 per cent on the investment. From this point there is a definite drop in return by even gradations until the investment reaches the $2,000,000 mark. After this point, again, there seems to be a strategic position enjoyed by concerns having an investment ranging from $2,000,000 to $5,000,000, with an average investment of $3,278,000. At this point the net return is 68 per cent, and is the highest percentage realized for any but the smallest group. In the last two groups, as only one sample is available in each case, the results are scarcely significant. However, it is interesting to find that in each case the net income is about 30 per cent on the investment, or less than half the proportion in the $2,000,000 to $5,000,000 group.

In Table 53, 201 different concerns are included. In the forging and foundry business there is apparently not so wide a range between the high and low amounts of capital invested. At any rate no companies earning in excess of 15 per cent on their invested capital are reported as having a capital above $1,000,000. This fact in all probability indicates that the

TABLE 52

Investment and Income Statistics of Steel Manufacturing Companies, Grouped According to Invested Capital (*Thousands Omitted*)

1. Castings

Group	1917						1916				
	1	2	3	4	5		6	7	8	9	
	Number in Each Group	Capital Stock	Invested Capital	Net Income	Per Cent		Capital Stock	Estimated Invested Capital	Net Income	Per Cent	
					4–2	4–3				8–6	8–7
Under $10,000	6	12.2	9.2	7.8	64.	85.	6.	4.5	.33	5.5	7.3
$10,000 to $20,000	12	11.8	16.	6.3	54.	39.	11.2	15.2	4.6	41.	30.
$20,000 to $50,000	27	25.	36.	13.	51.	36.	23.	33.	10.	46.	32.
$50,000 to $100,000	41	51.	74.	29.	58.	40.	43.	62.	15.	35.	24.
$100,000 to $200,000	41	98.	148.	54.	55.	36.	85.	127.	35.	40.	27.
$200,000 to $500,000	35	167.	324.	155.	92.	48.	153.	298.	97.	63.	32.
$500,000 to $1,000,000	15	402.	665.	280.	70.	42.	272.	449.	305.	112.	68.
$1,000,000 to $2,000,000	9	833.	1478.	534.	64.	36.	837.	1482.	298.	36.	20.
$2,000,000 to $5,000,000	5	1343.	3278.	2217.	165.	68.	743.	1814.	2375.	320.	131.
$10,000,000 to $20,000,000	1	8000.	12299.	3672.	46.	30.	7949.	12241.	1463.	18.	12.
$20,000,000 to $50,000,000	1	2625.	20199.	5898.	225.	29.	14731.	113281.	668.	4.5	59.

TABLE 53

Investment and Income Statistics of Steel Manufacturing Companies, Grouped According to Invested Capital (*Thousands Omitted*)

2. Forging and Foundry

Group	1917						1916				
	1	2	3	4	5		6	7	8	9	
	Number in Each Group	Capital Stock	Invested Capital	Net Income	Per Cent		Capital Stock	Estimated Invested Capital	Net Income	Per Cent	
					4–2	4–3				8–6	8–7
Under $10,000	6	6.2	8.2	4.7	76.	57.	6.	8.	1.4	19.	15.
$10,000 to $20,000	13	18.	17.1	11.	61.	64.	11.8	11.2	5.2	40.	42.
$20,000 to $50,000	59	22.	34.	11.	51.	32.	21.	33.	7.	34.	22.
$50,000 to $100,000	43	38.	70.	18.	49.	26.	34.	62.	15.	43.	23.
$100,000 to $200,000	40	84.	142.	42.	49.	29.	81.	14.	26.	32.	19.
$200,000 to $500,000	36	160.	341.	103.	65.	30.	136.	290.	66.	48.	23.
$500,000 to $1,000,000	4	372.	561.	257.	69.	46.	214.	320.	131.	61.	41.

TABLE 54

Investment and Income Statistics of Steel Manufacturing Companies, Grouped According to Invested Capital (*Thousands Omitted*)

3. Machine Tools

Group	1917						1916				
	1	2	3	4	5		6	7	8	9	
	Number in Each Group	Capital Stock	Invested Capital	Net Income	Per Cent		Capital Stock	Estimated Invested Capital	Net Income	P r Cent	
					4–2	4–3				8–6	8–7
Under $10,000	4	8.	9.2	5.	63.	54.	8.2	9.2	5.5	67.	58.
$10,000 to $20,000	7	11.4	18.4	8.4	74.	46.	11.4	18.4	7.6	66.	41.
$20,000 to $50,000	20	23.	36.	15.	64.	40.	19.	30.	13.	67.	42.
$50,000 to $100,000	19	43.	74.	24.	56.	32.	25.	43.	27.	105.	62.
$100,000 to $200,000	20	66.	132.	41.	62.	31.	596.	119.	45.	75.	38.
$200,000 to $500,000	14	125.	289.	109.	87.	38.	119.	274.	94.	79.	34.
$500,000 to $1,000,000	10	285.	686.	215.	75.	31.	255.	614.	217.	85.	35.
$1,000,000 to $2,000,000	5	702.	1482.	704.	100.	47.	546.	1152.	691.	127.	60.
$2,000,000 to $5,000,000	5	1723.	2893.	1058.	61.	37.	1744.	2912.	1043.	60.	36.
$10,000,000 to $20,000,000	1	25000.	17301.	5092.	20.	29.	25000.	17250.	5780.	23.	34.

larger establishments are realizing a much lower rate of return on their investment. In these companies it appears that the highest rate of return is earned, not by the lowest group, but by the second group, ranging in capital investment from $10,000 to $20,000 with an average investment of 17.1 thousand dollars. The maximum average return is 64 per cent at this point. For investments ranging from $20,000 to $500,000 the return seems to be pretty evenly balanced at about 30 per cent. In the smaller group with the largest investment, however, the net income increases to 46 per cent. Evidently this is also a strategic size, with average investment of $561,000.

It is interesting to find that for the 105 different machine tool companies studied in Table 54 the highest rate of return is also found in the smallest group, the average investment being 9.2 thousand dollars and the net income 54 per cent. From this point there is a definite and steady decrease in the rate of return until the investment group in excess of $200,000 is reached. In the latter group the rate of return swings suddenly upward to 38 per cent, though it drops again to 31 per cent in the following group. Those companies having an in-

TABLE 55

Investment and Income Statistics of Garment Manufacturing Companies, Grouped According to Invested Capital (*Thousands Omitted*)

Group	1917						1916				
	1	2	3	4	5	6	7	8	9	10	11
	Number in each Group	Capital Stock	Invested Capital	Net Income	Per Cent 4 to 2	Per Cent 4 to 3	Capital Stock	Est. Invested Capital	Net Income	Per Cent 9 to 7	Per Cent 9 to 8
Under $10,000	17	5.4	7.	4.2	77.	60.	5.2	6.7	2.8	57.	44.
$10,000 to $20,000	29	11.6	14.	2.4	21.	17.	6.1	7.4	1.9	31.	26.
$20,000 to $50,000	108	24.	32.	9.	35.	26.	22.	29.	8.	36.	27.
$50,000 to $100,000	57	50.	72.	17.	34.	24.	45.	65.	15.	35.	24.
$100,000 to $200,000	37	103.	145.	40.	39.	27.	100.	141.	33.	33.	24.
$200,000 to $500,000	25	191.	321.	80.	42.	25.	201.	336.	67.	33.	20.
$500,000 to $1,000,000	9	388.	663.	183.	47.	28.	416.	711.	145.	35.	20.
$1,000,000 to $2,000,000	7	618.	1176.	480.	78.	41.	544.	1033.	227.	42.	22.
$2,000,000 to $5,000,000	2	1075.	2349.	561.	52.	24.	825.	1798.	312.	38.	17.

vestment between \$1,000,000 and \$2,000,000 appear to be in a strategic position, with a net income of 47 per cent, which is the highest for any but the smallest concerns. From this point the drop is rapid as the size of investment increases.

The results of a study of 291 garment manufacturing companies are presented in Table 55. It appears that the highest net income is realized by those small concerns whose invested capital averages only \$7,000! These, no doubt, confine themselves in the main to hand work and the manufacture of specialties. They have few fixed obligations arising from the purchase of machinery and other equipment. In the next group the drop in net earnings to 17 per cent is very striking. Probably the figures indicate that concerns of this size have begun to utilize a good deal of machinery, or perhaps to invest in buildings, and have found the transition from the handicraft method to the machine method relatively unprofitable from the financial point of view. Beginning with the most numerous group, which reports an investment between \$20,000 and \$50,000, we find the returns very evenly balanced until an investment of \$1,000,000 is reached. For the next size the rate of return increases from 28 per cent to 41 per cent. This probably indicates that concerns which have reached such a size, with average investment of \$1,176,000, are specializing in a low grade mass production, in connection with which labor is much specialized and the personal element of service is reduced to the minimum. The fact that the largest group, with an average investment of \$2,349,000, shows a net return of only 24 per cent may indicate that all the economies of large size are attained in the preceding group with an investment only half as great.

Such studies as the foregoing might profitably be made for the many thousands of concerns engaged in other lines of industry, which were included in the report above mentioned. In interpreting the data which have been worked out, it must be remembered that 1917 was a year of abnormally high earnings, and that it was probably to the advantage of business concerns to report their invested capital as large as possible

with a view to reducing the amount of taxes paid. However, since for each class of industry all concerns are included which report a net income in excess of 15 per cent on the investment, and since the number of separate companies is comparatively large, the foregoing figures are worthy of careful consideration.

FINANCIAL RESULTS OF SIZE IN THE CENTRAL STATION INDUSTRY

A much more detailed study of the economies of size was made by the writer in connection with the United States Census of Central Electric Light and Power Stations, covering the year 1917. In order to make this investigation complete the financial and operating statistics of all electric generating stations in the United States (6,542) were analyzed. A most careful process of selection and elimination was followed in order to make certain that the plants retained for purposes of study would be fairly comparable. Finally, the analysis was narrowed to 1,416 plants under all forms of ownership and utilizing different sources of primary power. These generating plants were then grouped in accordance with their ownership into commercial, or privately owned stations, and municipally owned stations. Of the former there were 830 and of the latter 586, which served as the basis of investigation. An intensive study was also made of 944 additional electric plants which merely distribute and do not purchase current.

The most significant results, no doubt, were secured from the study of 370 commercial plants which generate current wholly by means of steam power and utilize only coal as fuel. These plants were grouped, not according to their investment, but according to the number of kilowatt-hours of current actually produced during the year. Because of the highly varying conditions in operation which are found in the electric light and power industry, a classification on the basis of "output" of current will make possible a much more illuminating study of financial statistics of operation than if the investment basis were used. Therefore, when plants are grouped in size in accordance with the number of kilowatt-hours of current pro-

duced, the effect of investment *per se* is minimized so far as the analytical results are concerned. Consequently, if under this grouping there is found a very definite tendency toward increasing, decreasing, or constant returns as the size of the individual establishment increases, the results should be even more conclusive.

It must also be remembered that because of the public regulation of the rates charged by central electric stations, a study of *costs* will be much more significant in determining tendencies than a study of net income. Since a company's rates will ordinarily be so regulated that the net income will always be reduced to a mere "fair return" on the average investment, this ratio would be substantially the same for different companies irrespective of their size.

Finally, it has been commonly, almost universally, asserted by economists that public service enterprises are operated under conditions of increasing returns and decreasing costs. In fact, local public service enterprises have been cited as examples *par excellence* of those business units which continue to secure increasing economies in production as the size of plant increases and as the population in the territory served grows. If, therefore, it appears that the common notion is mistaken in this regard, rather important corroborative evidence will be brought to bear upon the question of the financial result of "size" in those other types of manufacturing concerns which are ordinarily referred to as industrial enterprises.

In Table 56 it appears that, from the merely *physical* point of view, the larger plants are being operated more economically and are utilizing their investment to its full capacity over a longer period of time each year. This is shown by the fact that the group of largest plants with an average dynamo capacity of 186,260 kilowatts are generating each year 3,120 kilowatt-hours per kilowatt capacity of dynamos. Inasmuch as the maximum possible number of kilowatt-hours which could be generated in a given year by one kilowatt of dynamo capacity is 8,760 kilowatt-hours (365 days multiplied by 24 hours) it is apparent that on the annual basis these nine companies with an average output of 581,210,537 kilowatt-hours

TABLE 56

Comparative Financial and Operating Statistics of Selected Electric Generating Stations, Grouped According to the Number of Kilowatt-Hours Generated and the Type of Primary Power Used: 1917

Group	Number of stations.	Average dynamo capacity per station.	Kw. hours generated per kw. capacity of dynamos.	Average number of kw. hours generated per station.	Percentage Disposal of Current: Light.	Power.	Other companies.	Losses in distribution, etc.	Income per Kw. Hour Sold: Total from all sources.	Total from sale of current.	Light.	Power.	Other companies.	All other income.	Net income.
									Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Steam (Coal-using) Plants:															
Under 200,000 kw. hours	140	118	703	82,803	69.1	10.6	1.1	19.3	10.433	9.989	10.678	5.903	5.931	0.444	0.353
200,000 but under 500,000 kw. hours	66	288	1,108	318,465	55.0	22.8	3.6	18.6	7.828	7.377	8.811	4.288	5.000	0.451	0.426
500,000 but under 1,000,000 kw. hours	42	532	1,233	655,163	55.6	27.4	1.7	15.3	5.631	5.426	6.600	3.181	3.171	0.205	0.486
1,000,000 but under 2,000,000 kw. hours	26	860	1,560	1,342,497	46.3	27.6	5.5	20.6	5.707	5.458	7.473	2.498	3.338	0.250	0.794
2,000,000 but under 5,000,000 kw. hours	30	1,718	1,822	3,130,069	28.5	41.4	13.6	16.5	4.081	3.903	7.036	2.352	2.064	0.177	0.543
5,000,000 but under 10,000,000 kw. hours	19	4,166	1,685	7,021,922	24.7	42.0	13.9	19.4	3.876	3.755	7.461	2.297	1.567	0.122	0.438
10,000,000 but under 20,000,000 kw. hours	11	5,949	2,183	12,986,584	18.0	46.9	17.9	17.2	2.656	2.553	6.430	1.675	0.958	0.103	0.490
20,000,000 but under 50,000,000 kw. hours	15	12,986	2,120	27,537,040	19.8	42.6	21.8	15.9	2.593	2.534	5.193	1.832	1.493	0.059	0.420
50,000,000 but under 100,000,000 kw. hours	8	29,858	2,482	74,115,002	19.1	43.7	20.2	17.0	2.442	2.297	4.612	1.877	1.017	0.144	0.487
100,000,000 but under 200,000,000 kw. hours	4	46,260	2,768	128,058,872	18.4	44.0	24.8	12.8	1.680	1.627	4.036	1.163	0.664	0.053	0.294
200,000,000 kw. hours and over	9	186,260	3,120	581,210,537	26.9	31.6	24.9	16.5	2.591	2.487	4.939	1.565	1.006	0.104	0.553

TABLE 56 (*Continued*)

Comparative Financial and Operating Statistics of Selected Electric Generating Stations, Grouped According to the Number of Kilowatt-Hours Generated and the Type of Primary Power Used: 1917

Group	Expenses														
	Total per kw. hour sold.	Supplies and materials per kw. hour sold.	Salaries and Wages		Fuel			Miscellaneous expenses per kw. hour sold.	Insurance per kw. hour sold.	Taxes			Depreciation		
			Per kw. hour sold.	Per cent of total expenses.	Per kw. hour generated.	Per kw. hour sold.	Per cent of total expenses			Per kw. hour sold.	Per cent of total expenses.	Per cent of investment.	Per kw. hour sold.	Per cent of total expenses.	Per cent of investment.
	Cents	Cents	Cents		Cents	Cents		Cents	Cents	Cents			Cents		
Steam (Coal-using) Plants:															
Under 200,000 kw. hours	10.080	0.967	3.285	32.6	3.103	3.836	38.1	0.533	0.152	0.298	3.0	0.9	0.521	5.2	1.6
200,000 but under 500,000 kw. hours	7.401	0.554	2.148	29.0	2.286	2.809	38.0	0.532	0.155	0.251	3.4	1.0	0.335	4.5	1.3
500,000 but under 1,000,000 kw. hours	5.145	0.392	1.409	27.4	1.476	1.732	33.7	0.523	0.082	0.204	4.0	0.7	0.339	6.6	1.2
1,000,000 but under 2,000,000 kw. hours	4.913	0.341	1.289	26.2	1.297	1.632	33.2	0.349	0.076	0.211	4.3	0.8	0.450	9.2	1.8
2,000,000 but under 5,000,000 kw. hours	3.535	0.297	0.833	23.6	1.027	1.226	34.6	0.249	0.052	0.178	5.0	1.1	0.273	7.7	1.7
5,000,000 but under 10,000,000 kw. hours	3.438	0.218	0.797	23.2	0.900	1.107	32.2	0.287	0.046	0.186	5.4	1.0	0.367	10.7	2.0
10,000,000 but under 20,000,000 kw. hours	2.166	0.109	0.481	22.2	0.600	0.722	33.3	0.258	0.014	0.153	7.1	1.0	0.117	5.4	0.8
20,000,000 but under 50,000,000 kw. hours	2.173	0.106	0.486	22.3	0.602	0.708	32.6	0.243	0.021	0.170	7.8	1.2	0.154	7.1	1.1
50,000,000 but under 100,000,000 kw. hours	1.955	0.131	0.443	22.6	0.520	0.613	31.4	0.125	0.011	0.137	7.0	1.1	0.196	10.1	1.6
100,000,000 but under 200,000,000 kw. hours	1.387	0.048	0.288	20.7	0.441	0.489	35.3	0.152	0.012	0.090	6.5	0.9	0.106	7.7	1.1
200,000,000 kw. hours and over	2.038	0.130	0.494	24.2	0.462	0.541	26.5	0.292	0.021	0.204	10.0	1.9	0.133	6.5	1.2

TABLE 56 (*Continued*)

Comparative Financial and Operating Statistics of Selected Electric Generating Stations, Grouped According to the Number of Kilowatt-Hours Generated and the Type of Primary Power Used: 1917

Group	Expenses—Cont'd: Interest: Per kw. hour sold.	Expenses—Cont'd: Interest: Per cent of total expenses.	Dividends: Per kw. hour sold.	Dividends: Per cent of investment.	Value of Plant and Equipment: Per kw. hour sold.	Value of Plant and Equipment: Per kw. capacity of dynamos.	Value of Plant and Equipment: Per employee.	Value of Plant and Equipment: Total income—Per cent of investment.	Employees (Including Salaried Employees): Number per station.	Employees: Average compensation.	Employees: Kw. hours sold per employee.	Employees: Total income per employee.	Fuel—Coal: Price per ton.	Fuel—Coal: Pounds per kw. hour generated.
	Cents		*Cents*		*Cents*	*Doll's*	*Dollars*			*Doll's*		*Doll's*	*Doll's*	
Steam (Coal-using) Plants:														
Under 200,000 kw. hours	0.489	4.9	0.250	0.8	31.5	179	$ 6,810	33.2	3.1	713	21,712	2,265	3.40	18.26
200,000 but under 500,000 kw. hours	0.617	8.3	0.230	0.9	26.2	236	9,530	29.9	6.3	879	40,912	3,203	3.87	11.88
500,000 but under 1,000,000 kw. hours	0.462	9.0	0.397	1.4	28.8	303	13,890	19.5	9.5	830	58,893	3,316	3.39	8.71
1,000,000 but under 2,000,000 kw. hours	0.564	11.5	0.508	2.0	25.1	312	14,180	22.7	16.3	843	65,426	3,734	3.59	7.32
2,000,000 but under 5,000,000 kw. hours	0.427	12.1	0.369	2.3	16.0	244	15,660	25.5	24.8	883	105,889	4,322	3.57	5.78
5,000,000 but under 10,000,000 kw. hours	0.430	12.5	0.343	1.9	18.0	247	18,860	21.5	51.1	890	111,673	4,329	4.16	4.35
10,000,000 but under 20,000,000 kw. hours	0.312	14.4	0.329	2.2	14.8	268	25,880	18.0	59.1	880	182,877	4,858	4.16	2.95
20,000,000 but under 50,000,000 kw. hours	0.284	13.1	0.357	2.5	14.5	261	25,910	17.9	126.9	898	184,622	4,789	3.61	3.34
50,000,000 but under 100,000,000 kw. hours	0.298	15.2	0.384	3.1	12.3	259	25,050	19.8	302.8	919	207,687	5,071	3.25	3.32
100,000,000 but under 200,000,000 kw. hours	0.201	14.5	0.301	3.1	9.9	246	36,140	17.0	315.0	1,053	366,289	6,157	3.60	2.55
200,000,000 kw. hours and over	0.223	11.0	0.420	3.8	11.0	293	22,310	23.6	2,446.5	1,002	202,755	5,254	3.71	2.49

are utilizing their generating equipment to about 35.6 per cent of the theoretically possible utilization. The numerous group of small plants, however, does not show more than one-third this degree of efficiency.

The income received per kilowatt-hour sold for all purposes is of interest in that it shows the decreasing price of electrical current as the scale of operations is increased. It must be remembered, however, that much of the apparent decrease in price of current is attributable to the fact that larger plants naturally sell much more current for power than do the smaller plants. The more technical aspects of this matter need not be dwelt upon in this connection. Attention should, however, be called to the interesting fact that the average income from the sale of current remains relatively constant in all groups of stations after the 10,000,000 to 20,000,000 kilowatt-hour size has been reached.

More significant for our present purposes is the study of comparative cost data and of various investment relations which are observable. It is again significant to find that the costs of current per kilowatt-hour sold decrease rather rapidly until that group of plants is reached which generates from 10,000,000 to 20,000,000 kilowatt-hours annually. From this point, with one exception, there seems to be a balancing of unit costs. No further aggregate economies in cost as the result of size are evident. The one exceptional case is accounted for by the fact that only four plants are included in this group and that they are operated under rather unusual conditions, furnishing a very large proportion of their current in bulk to other companies or selling in exceptionally large quantities to power consumers. The expenditure for salaries and wages likewise shows no definite tendency to decrease after the afore-mentioned group of plants has been reached.

An analysis of the various other items of expense reveals the fact that after the 20,000,000 kilowatt-hour stage there is no definitely observable tendency to decreasing unit costs as the size of plant increases, except in the matter of fuel. This one item shows a continuous, though comparatively slight, decrease from this point until the last group is reached. Taxes,

on the other hand, appear to increase at this stage, both on the kilowatt-hour basis and as a percentage of total expenses. In the group of plants with an output in excess of 200,000,000 kilowatt-hours, the percentage of operating expenses paid for taxes (10.0 per cent) is higher than for any other group.

The investment figures are also very illuminating. It appears that there is no tendency whatever toward a decreased investment per kilowatt capacity of dynamos as the station increases in size. In fact, the investment in the largest group ($293) is exceeded by only two other groups, though the difference is not very marked. The total income computed as a percentage of the investment shows a tendency to decrease until the 10,000,000 to 20,000,000 kilowatt-hour group is reached, after which point a balanced condition seems to maintain until the highest group is reached.

The statistics indicating the relative efficiency and importance of employees in the plant economy are very vital. It appears again that after the 10,000,000 to 20,000,000 kilowatt group is reached the number of kilowatt-hours sold per employee increases to a very slight extent compared with the many-fold increase in the size of plants. Further, the total income per employee appears practically to have struck a balance.

The investment in plant and equipment per employee (including both workers and salaried employees) increases rapidly as the costs of operation decrease until the 10,000,000 to 20,000,000 kilowatt-hour group is reached. After this point, with the one exception which has already been referred to, the investment per employee maintains a remarkable uniformity. A careful comparison of these figures with others in the table shows that there is a directly inverse relation between the capital investment per employee and the salaries and wages paid per kilowatt-hour sold. In next to the last group we find the highest investment of all per employee ($36,140) and the lowest unit cost for salaries and wages (0.288 cents). In the largest group the investment per employee drops to $22,310, which is the lowest for the five large groups, and the unit expenditure for salaries and wages increases to 0.494 cents, which

is the highest rate for these groups. It is further significant to note that the average compensation per individual does not affect the situation, the highest average wages being paid by that group of plants which report the lowest unit expense for salaries and wages.

The foregoing figures are vitally significant because of the light which they throw upon a much misunderstood problem. It is very evident, however, that the only sure gain which comes through increased size in the central electric industry is the slight progressive reduction in the cost of fuel as the size of generating units and boiler room economies increase. No other expenses seem to decrease in like manner, while in some cases they tend upward.

The larger the plant grows, after a certain point has been reached, the farther must distributing lines be extended in order to serve the larger body of customers. Also, in a congested district an increased investment is demanded because of the necessity of putting many of the transmission lines underground. So far as actual operation is concerned, many new expenses are incurred by the larger plants in an effort properly to serve their communities. For publicity purposes of different sorts the outlays increase. It will be noted that the unit cost for miscellaneous expenses is higher for the group of largest plants than for any other group. After the 10,000,000 to 20,000,000 kilowatt-hour size has been reached, a point seems to come when the efficiency of labor combined with capital does not increase. In fact, it is probable that for the largest plants there is an actual loss in labor efficiency due to the difficulties of adequate supervision and the constant interruptions which are bound to result in the working day when operations are extended throughout a wide and congested territory.[1]

An analysis of 571 typical commercial stations which purchase *all* of the current which they sell and have no generating equipment whatever indicates much less definite tendencies. There is, however, a marked progressive decrease in the total

[1] For a much more elaborate presentation of these statistics see Lincoln, *Central Electric Light and Power Stations,* 1917 (Census Report), Chapter X, pages 126-142. In 1928 only 1.76 pounds of coal were used per K.W.H.

expenses per kilowatt-hour sold until that group is reached which purchases from 2,000,000 to 5,000,000 kilowatt-hours. In this group and the next (5,000,000 to 10,000,000 kilowatts) expenses seem to be fairly evenly balanced. There is another definite decrease when the 10,000,000 to 20,000,000 kilowatt-hour group is reached, after which no definite tendencies are observable because of the small number of plants included in the study.

There is much need for further intensive study regarding the financial economies of size in all lines of industry. In order to make a thoroughly worth-while investigation it is necessary to know definitely the actual investment in plant as well as the physical volume of output and the number of workers employed. The mere juggling of analyses based on investment and net earnings is insufficient, because of the great uncertainty which results from the lack of uniform methods of accounting. It is much more satisfactory and significant in these studies to deal with definite physical units whenever their quantity can be ascertained.

A good deal of light was thrown on questions of "size" during the war period when many plants expanded rapidly. It was very frequently found that as the scale of operations grew, the productive efficiency decreased and the quality of the product suffered. It was difficult to provide for the same degree of careful inspection of materials as the output increased. It was also much more difficult to deal with the human element in production. It is not safe, however, to draw hasty conclusions from war-time experiences, since expansion was far too rapid to permit an ordinary growth from small scale to large scale operations. Caution must also be exercised in applying too broadly any conclusions which may be drawn from a few single instances. There are times when the profitable size of a corporation will be pretty largely determined by the nature of its relations with other corporations which supply its raw material or which purchase its product. The selling expense is one of the heaviest burdens after the cost of material which enters into the price of the finished product. When through

community of interests, ownership, or other friendly relations this expense is largely decreased or wholly eliminated, this fact may have an appreciable effect in determining the most suitable size of establishment.

CONCLUSIONS REGARDING THE FINANCIAL RESULTS OF SIZE IN MANUFACTURING CONCERNS

At this point it may be well to sum up the more obvious results of the preceding discussions, so far as they relate to the most profitable size of industrial enterprises, with particular reference to manufacturing concerns.

1. In many lines of industry there is probably a most satisfactory "size" which, if attained, will normally result in the highest financial efficiency, that is, it will normally produce the highest amount of net income per unit of capital and labor expended.

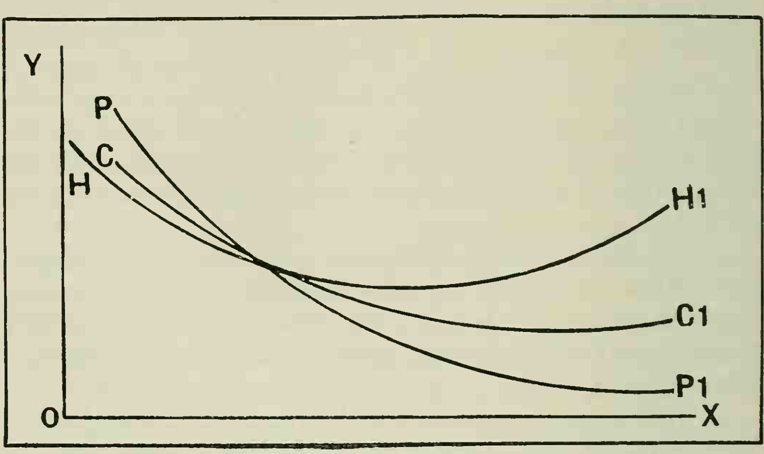
2. In a given industry there may also be certain "strategic" sizes which are financially more profitable than those groups of plants which are immediately smaller or larger. There might conceivably be several different "best" sizes in the economic sense.

3. This "highest efficiency point," from the financial point of view, may not coincide with the point which might from an engineering standpoint be regarded as the most efficient size. The engineer has tended to think in terms of mere physical perfection and technical skill, without sufficiently stressing the human factors in production and the interrelation of the various elements of expense which vitally affect the size of the net returns per unit of capital invested.

4. Ordinarily the most economic size of productive unit will be a factor of two variables. The physical gains which might theoretically result if nothing but machinery and material had to be considered will be counterbalanced by the human equation. As technical efficiency increases, capital is substituted for labor in many of the processes of production. There are, however, distinct limits to the managerial capacity of any one

individual or group of individuals acting conjointly. While the "physical efficiency curve" may descend more or less indefinitely, though its downward trend will not be marked after a time, the "labor and management curve" will, after a certain point, almost inevitably tend upward. The resultant of these two curves, which with sufficient data might be statistically ascertained, will presumably indicate the most profitable size of plant.

The following diagram will roughly indicate the thought which the writer has in mind.



In the above diagram the cost of production per unit is measured on the perpendicular axis OY while the number of units produced will be measured on the horizontal axis OX.

HH[1] may be supposed to represent the *human efficiency* curve. Its upward trend after a certain point indicates that for an additional equal application of labor along with a fixed unit of capital the returns decrease as measured in units of goods, or viewed from another angle, an additional application of labor will be required in order to produce the same number of units of goods.

PP[1] represents the *physical efficiency curve.* Its rather marked downward tendency indicates the possibility of increasing mere material efficiency as the scale of operations is increased. After a point, however, even the physical efficiency

tends to increase slowly, if at all, as the scale of operations grows.

The resultant curve CC^1 may be assumed to indicate the actual cost of production per unit of goods as the scale of production changes.

When the human efficiency curve, allowance having been made for the relative amounts of capital and labor employed in the productive processes, tends upward so rapidly that the gains arising from mere physical efficiency are more than counterbalanced, the cost of production per unit of goods begins to increase and further expansion of operations can be made only at a loss. Probably, however, the point of "maximum returns" will have been reached at a much earlier period.

5. In determining the most suitable size of an industrial enterprise the proper combination of labor and capital is of vast significance. One size or another may be most profitable in a given industry, depending upon the extent to which machinery is used or not used along with man power. Some industries from their very nature can decidedly minimize the human element by the utilization of machinery for routine operations. Such concerns may normally and profitably attain great size.

6. Because of the rapid changes in the arts there will be a frequent shift of the strategic points as above outlined.

7. It must also be remembered that "size" in itself frequently results in less flexibility or mobility. The larger an establishment grows, frequently the more unalterably it is committed to a definite line of action. If hopes are not realized or if changes in demand or sources of supply affect the particular industry, great losses may inevitably result in spite of the economies which might temporarily have been secured through large scale production. In times when business is dull, the overhead expenses will press with greater severity. The problem of supplementary costs at certain stages in the business cycle will be a serious one. The capital risks of the larger enterprises, therefore, are greater both because of specific changes in industry and because of the cyclical movements of industry. That scale of production which might seem to be most advantageous at one period in the business cycle might

prove to be distinctly disadvantageous at another period. Caution, therefore, would at all times suggest that it is best to err on the side of under-development of the productive unit rather than over-development.

8. Finally, all available statistics point to the fact that there is a definite "law of diminishing returns" applying to industry, as well as a law of "balanced return." As the size of the productive unit increases, a point is reached at which there seems to be no particular advantage or disadvantage in increasing the size of the establishment. Thus a stage of "balanced return" or "constant cost" is reached. After this point there may be a decided decrease in the economic efficiency of a business as its size increases. In other words diminishing returns will have set in. This phenomenon has long been clearly recognized as applying to the cultivation of land, though many have been slow to admit its application to industry in general. It is particularly true in the telephone industry. For working purposes the following statement of the law may be useful. *After a certain point has been reached in the utilization of the various factors in production*—primarily labor and capital in industrial enterprises—*successive equal applications yield diminishing returns.*

In other words, as applied to the world of industry and trade, there comes a time when it is no longer profitable to spend money in increasing the size of a given plant, in installing larger units of machinery, in applying more labor to the same plant, and so forth. The same expenditure of money will not produce as high net returns, or, in other words, increasing outlays will be needed in order to realize the results earlier attained by means of a less expenditure. Larger units of machinery may cost too much to make or to set up; greater risks will be run because of possible breakage; too much loss would be caused through stoppage of operations.

Also, a point is reached beyond which it is not profitable to expand the enterprise further through the construction or purchase of new plants. Diminishing returns become evident because of the limitation in management and labor. As management is spread more thinly over a larger number of plants, its effectiveness is proportionately decreased. Labor, in turn, may

lose its initiative and energy through *too great specialization.* It may also lose in effectiveness because of the impersonal relations which inevitably develop in the larger scale establishments. The law applies to individual operations as well as to the general plant operations.

Economies of Size in Trading Enterprises

While our attention has been primarily centered on manufacturing concerns, the question of size is also significant in the distributing business, though the losses incurred through uneconomically large or small units may not always be so severely felt as in the case of manufacturing businesses. There are, however, a few definite tendencies observable as the scale of operations changes, even in the retail and wholesaling business. The following table (Table 57) prepared by the Harvard Bureau of Business Research indicates some of the interesting variations in the unit costs of operation which are observed in department stores, classified according to their volume of sales. There is a clearly defined trend toward increasing net profits as the scale of operations increases.

With respect to the various specialty retail stores, it is difficult to draw definite conclusions regarding the effect of size on net profits. However, the following observations seem generally justified:

(*a*) Firms with a small volume of sales usually show the highest percentage figure for wages of sales force.

(*b*) Advertising expenses increase progressively as the size of the store increases.

(*c*) Delivery expenses apparently increase as the volume increases.

(*d*) The amount paid for rent appears to be relatively higher for the larger stores, although on this point figures are not conclusive.

(*e*) The rate of stock-turn usually increases with greater size.

(*f*) Net profits are usually higher for the larger stores.

TABLE 57

OPERATING EXPENSES IN DEPARTMENT STORES CLASSIFIED BY VOLUME OF SALES IN 1924

(*Net Sales = 100 per cent*)

Class of Expense	Less than \$250,000	\$250,000 to \$499,000	\$500,000 to \$999,000	\$1,000,000 to \$3,999,000	\$4,000,000 to \$9,999,000	\$10,000,000 and Over
Number of Stores Reporting	184	124	91	117	31	20
Salaries and Wages	14.8%	15.4%	16.2%	16.3%	16.0%	15.6%
Rentals	2.3	2.4	2.4	2.9	3.0	3.5
Advertising	2.0	2.2	2.6	3.2	3.3	3.1
Taxes	0.75	0.7	0.65	0.6	0.4	0.4
Interest	2.9	2.4	2.1	2.1	1.7	1.4
Supplies	0.65	0.7	0.95	1.3	1.5	1.3
Service Purchased	0.8	0.8	0.75	0.7	0.5	0.5
Unclassified	1.0	1.0	1.2	0.9	1.2	1.0
Traveling	0.35	0.45	0.4	0.5	0.4	0.4
Communication	0.2	0.3	0.3	0.3	0.2	0.2
Repairs	0.15	0.2	0.25	0.2	0.25	0.35
Insurance	0.6	0.55	0.5	0.35	0.3	0.25
Losses from Bad Debts	0.3	0.35	0.25	0.3	0.2	0.2
Depreciation	0.55	0.6	0.65	0.7	0.6	0.6
Professional Service	0.15	0.15	0.15	0.15	0.15	0.15
Total Expense	27.5%	28.2%	29.4%	30.5%	29.7%	29.0%
Gross Margin	27.5	28.6	30.2	31.8	32.6	33.2
Net Profit	0.0%	0.4%	0.8%	1.3%	2.9%	4.2%
Stock-turn, times a year	2.0%	2.4%	2.8%	3.2%	3.8%	4.4%

A recent intensive study of costs in the retail distribution of clothing seems to run counter to the tentative conclusions reached for other lines of retailing.[1] The following interesting facts appear:

(*a*) Total expense per dollar of net sales increased as the stores increased in size.

(*b*) The net profit on sales decreased as the stores increased in size.

(*c*) The per cent spent for salaries and wages increased as the volume of sales increased.

Hitherto not much effort has been made to study the comparative economies of "size" in the distributing business on the basis of employee efficiency. The following table (Table 58)

[1] *Costs, Merchandise Practises, Advertising, and Sales in the Retail Distribution of Clothing,* a survey conducted under the auspices of the Bureau of Business Research of Northwestern University School of Commerce.

shows for 322 wholesale grocery stores in 1920 the relative "efficiency" of salesmen according to their average annual volume of sales. The stores are grouped in accordance with their annual volume of sales. Apparently the highest degree of sales efficiency both from the point of view of volume and of expense is reached in the group of 37 stores reporting annual sales between $1,500,000 and $2,000,000.

TABLE 58

AVERAGE ANNUAL SALES PER SALESMAN IN WHOLESALE GROCERY STORES IN 1920, GROUPED ACCORDING TO VOLUME OF SALES[1]

Volume of Net Sales per Firm	Number of Firms	Annual Sales per Salesman	Sales Force Expense (% of Net Sales)
Less than $500,000	35	$131,000	2.4%
$500,000 to $999,000	96	171,000	2.1
$1,000,000 to $1,499,000	68	180,000	2.0
$1,500,000 to $1,999,000	37	199,000	2.0
$2,000,000 and over	86	182,000	2.1

FINANCIAL PROBLEMS OF DEPARTMENT STORES

The tendency toward large scale operations in trading manifests itself primarily in three ways through the growth (*a*) of department stores, (*b*) of mail order houses, and (*c*) of chain stores.

Some department stores have grown enormously large. Marshall Field and Company, for example, report that in 1920 their total net sales amounted to $183,600,000, while the net profits for the year after payment of federal taxes amounted to 2.39 cents on each dollar of sales. However, the return realized on their capital invested was reported by them to be only 6.3 per cent—not much higher than the return on United States Government bonds during the same year. Throughout the period, 1915 to 1920, they report average net profits of 4.9 cents per dollar of goods sold. These figures are given because Marshall Field and Company is probably the largest depart-

[1] Harvard Bureau of Business Research, *Bulletin No. 26*, page 24.

ment store in the world, and has had a most conservative and consistent growth.

According to the figures compiled by the United States Commissioner of Internal Revenue for the year 1919, 54,296 of the incorporated trading companies in the United States earned almost 15 per cent on their investment after the payment of federal taxes, or almost 20 per cent before taxes were paid. In other words, the average rate of income of these concerns, with an average investment of only $132,000 and average sales of $363,400, was almost two and one-half times as great as that of Marshall Field and Company during the following year. No doubt, because of the change in business conditions, the net return of these companies would have shown a very considerable drop in 1920.

All the data available indicate that department stores as a rule operate at a high percentage of expense to sales as compared with specialty stores. Their wages and salaries are usually higher, as well as their expenditures for advertising and rent. Their operating expenses increase because of the necessity of carrying large and miscellaneous stocks of goods. There is also a loss of individuality in service which makes for decreased efficiency throughout the organization. In order to maintain the high degree of operating effectiveness which might readily be achieved by the specialty store, it is necessary for a department store to expend a great deal of money for supervision, training, and the like. Inasmuch as the department store "specializes" in so many different lines of goods, it is a question whether any gains come through quantity purchasing which could not as readily be realized by the specialty store. However, through scientific management, the larger department stores are more successful than the smaller and are making fair profits on a higher turnover.

It is further significant to note that, while the department store collects under one roof many different kinds of articles, thus making it easier for the purchaser, on the other hand it is frequently necessary for the purchaser to come far out of his way to the department store, which is usually centrally located. From this point of view, therefore, it may be a question how

much genuine economic service is rendered by the large, centrally located department stores, which do not go out to meet the customer, but which must attract him through increased advertising and attractive layout of store premises.[1]

FINANCIAL PROBLEMS OF MAIL ORDER HOUSES

Another interesting development in the history of retailing establishments is furnished by the growth of retail mail order houses, of which by far the largest is Sears, Roebuck and Company. Mail order houses may specialize in certain types of goods or may carry an assortment of many lines. The larger houses have also become somewhat integrated, frequently developing factories which supply their needs. Sears, Roebuck and Company, for example, recently reported (1927) an investment of nearly $57,000,000 in property, plant, machinery, factories, branch houses, and the like. The company owns a controlling interest in various manufacturing plants located in different parts of the United States. They also own outright at least 15 different factories devoted to the making of almost every conceivable product from shoes to farm implements and portable houses. The maximum net sales reported by this company were, in 1919 and 1920, $234,000,000 annually. However, in spite of its size and the vast scope of its operations, or perhaps because of these reasons, the company incurred a deficit of more than $19,000,000 in the year 1921! Not all mail order houses enter the manufacturing business as Sears, Roebuck and Company have done, though it is a frequent practise in this line of business.

While it has sometimes been urged in favor of mail order houses that they can supply customers directly from the factory and so do not need to carry a large inventory, this assertion appears to be mostly a dream. To refer to Sears, Roebuck and

[1] The number of department stores in the United States is not definitely known. It is difficult to draw a line between what is actually a "department" store and a general merchandise store. The Federal Reserve Board now receives sales figures from about 565 department stores, the aggregate annual sales of which approximate $2,000,000,000, or over $3,500,000 per store. There are probably at least 6,000 stores with total annual sales of around $6,500,000,000, or more than 15 per cent of all retail sales. The volume does not seem to be increasing.

Company once more, their inventory increased from a little more than $13,000,000 in 1914 to $105,000,000 in 1920, though, largely through shrinkage in value, it dropped to $46,000,000 at the end of 1921. Obviously the larger a mail order house becomes, the more different commodities it will carry and the more it will probably attempt to enter the field of production. The risks of increasing size are often multiplied manyfold. In fact, the worst business risks of nearly every type of industry are concentrated under one management. Without further discussion of the mail order house, some of the chief drawbacks from the financial point of view are the following:

1. There is grave danger that in times of prosperity too large inventory will be carried in order to give prompt service to customers. Also, on account of the necessity of stocking up innumerable lines, the aggregate investment in inventory may become unwarrantedly high. However, the annual stock-turn in Sears, Roebuck is now over 5 times—higher than in most department stores, but lower than in good chain stores.

2. When prices are tending rapidly upward the catalog house is at a disadvantage because it is not possible to revise its quoted prices with sufficient frequency to enable it to profit immediately by the increase.

3. When general prices are tending downward the catalog price of goods again becomes unsatisfactory and there is danger of losing trade unless concessions are made. However, it is impossible to change prices with great frequency, nor is it expedient or even possible to forecast the definite trend of prices at the time catalogs are published.

4. Mail order houses depend for their business to a large extent upon the rural or the small town population which frequently suffers most severely in times of business depression, so that temporarily trade is lost.

5. The lack of any direct personal service makes it very difficult for a mail order house to compete with stores with which the customer can deal directly. The chief bait, therefore, which can be offered to the customer, is the attraction of lower prices than he could obtain elsewhere. As the margin of

possible profits is cut to a lower point, the risks of operation proportionately increase.

6. Finally, mail order houses tend to have very high operating expenses in spite of the fact that no direct personal service is given to the customer. The expenses for packing, shipping, and correspondence are very high. Additional expenses and losses are incurred because of the large proportion of returned goods. From year to year Sears, Roebuck and Company deduct around 8 per cent from their gross sales for returns, allowances, discounts, and the like. Advertising by means of the distribution of catalogs also requires a heavy outlay, but the net profit in 1927 was 11.4 per cent of net sales.

The rapid increase in Sears, Roebuck gross sales to $347,-000,000 in 1928 is due in no small measure to the opening up of retail stores on a large scale—there were 30 in 1928 in leading cities. The future of the mail order business as such is still uncertain.

FINANCIAL PROBLEMS OF CHAIN STORES

The most far-reaching development of large scale operations in the trading business is found in the chain store movement. Chain stores are now to be found in great numbers in the grocery business, cigar, drug, dry goods, novelty stores, restaurants, candy and the like. It has been estimated that in 1928 there were probably more than 4,000 important chain store systems operating in the United States, and at least as many smaller ones in addition. It is further estimated that the affiliated and operated stores connected with these chains amount in number to 100,000 or more. These stores probably sell at least 15 per cent of all goods sold at retail, or more than $6,000,000,000 per year, and are rapidly increasing in volume. The methods and relations of the various chains differ in a marked degree. At one extreme are the retail stores operated and owned by the W. L. Douglas Shoe Company or the United Drug Company; on the other hand is the original type of chain store such as the Woolworth 5- and 10-cent stores, or the Great Atlantic and Pacific. In the chain store movement

there is again the possibility of branching out to such an extent that sources of supply may be controlled and in certain instances this step has been taken. The Great Atlantic and Pacific now owns bakeries, canneries, and fisheries.

Figures recently compiled suggest the following as average expense figures for grocery chain stores based on the total net sales:

Gross profit	15 to 17.5 per cent
Net profit	at least 3.0 per cent
Total expense	varies from 12.5 per cent to 14 per cent or more
Rent	1.9 per cent
Total salaries and wages	7.5 to 8.0 per cent

These figures are merely suggestive, not definite in any sense. Different types of chain stores will show widely varying percentages. Those which turn the inventory most rapidly probably show the highest percentage of net profit on sales. In general, it is probable that the novelty chain stores, of which the F. W. Woolworth Company is typical, have realized the highest returns both on net sales and on capital invested. This company in 1927 turned its inventory 8 times and earned 12.5 per cent on sales.

From the financial point of view many chain stores have been highly successful. This success is largely due to the fact that the expenses of operation are usually lower in chain stores than in other types of retailing establishments. This is due to a number of causes, such as the following:

(*a*) Standardized methods of operation; (*b*) quantity purchases (frequently the entire output of a factory is contracted for); (*c*) the turnover of inventory is usually much more rapid than in individually operated stores; (*d*) the amount of service rendered is reduced to the minimum so that there is a great saving in labor costs. In most cases delivery expenses are eliminated altogether; and (*e*) no credit is granted.

It is well to remember that the chief advantages of the chain store result through mass production—quantity purchasing, standardized operation, and rapid selling. The only attraction

of the chain store from the customer's point of view is the fact that service is quick and goods are cheap. Whenever the element of style or individuality enters into the problem, the peculiar advantages of the chain store organization would quickly be lost. On the other hand, because of the low-priced goods ordinarily carried, many types of chain stores thrive when general business conditions are unfavorable. At such times people who ordinarily patronize other types of stores wish to profit by the lower prices which can be secured through the chain store.

The Woolworth Company was never before so prosperous as in the year 1921. During this year the net sales, $147,654,647, were the highest on record, and the surplus after the payment of all common and preferred dividends amounted to nearly $8,000,000. This result was achieved in spite of the fact that 8 per cent dividends were paid on $50,000,000 of "watered" stock issued solely to cover good-will (since written down). The experience of the Woolworth Company is particularly significant in that its tremendous size (there were 1,725 stores at the end of 1928, with aggregate net sales of $287,318,720) has been built up solely on the sale of 5- and 10-cent articles.

Not so many years ago when Mr. Woolworth endeavored to enlist the financial support of a very famous New York banker, the latter is said to have replied that he was interested in financing and not in the 5- and 10-cent business; he was watching millions and not dimes. However, many of the ventures fathered by this particular banker have died a natural death or have been little heard of, while the F. W. Woolworth Company, built on the basis of most minute sales and quick stockturns, appears to be capable of almost indefinite profitable expansion along the lines now being followed.

Caution is needed, however, in developing a chain store organization in order to avoid over-expansion and the location of stores at non-strategic points. Also, whenever the organization departs from the selling of low-priced articles, the risks of this form of retailing become extraordinarily great, particularly because of the limitations imposed in connection with the management of the large number of branch stores.

CHAPTER XXII

FINANCIAL ASPECTS OF SELLING GOODS

The place of selling in the financial program—The costs of marketing—Elimination of the middleman—The wholesalers functions—Some price problems—Influences determining the price policy—Conditions under which it is profitable to sell below cost—Shall prices be uniform?—Price guaranties—Guaranties of quality—Price maintenance—The stock turnover in relation to profits—Financial aspects of advertising—How much shall be spent for advertising?—Possible wastes of advertising—Economic functions of advertising—Who pays the bill?

IN recent years much attention has been given to the volume of sales in dollars both in our domestic and foreign trade. As this index of business prosperity pointed upward it was the tendency of most concerns to expand their plants and launch upon a larger scale of operations with a view to keeping pace with the apparently increasing demand for goods. Tremendous pressure was exerted by the selling department in order to secure greater production. Many a concern with mounting volume of sales was rapidly sold into a receivership as the bubble of inflation burst.

Attention is naturally centered upon the selling end of a business. This is its *publicity* department. The distribution of goods is much more interesting and spectacular, so far as the average man is concerned, than the quieter process of production. The importance of the sales department is unduly magnified within the business organization itself due to the common assumption that "profits are not made until the goods are sold."

This statement is a most misleading half-truth. While it is true that no business can make money unless its goods are sold, it is equally true that the mere selling of goods does not assure a profit. Many a salesman has induced his company to manufacture goods which could be sold only at a loss. Many an order has been taken only to be canceled later by the purchaser. Many an account is so slow that the seller of goods

is almost forced to assume the position of an investment banker. Finally, in many instances payment is never received for goods which are sold.

Obviously, therefore, a profit cannot be made until *money* is received by the seller, nor is a profit necessarily realized even then unless there has been the proper relation between the selling program and the production program. It very frequently happens that goods are actually sold at a price which yields no net profit or merely a nominal profit. Mere volume of sales may mean financial loss instead of gain, and in spite of any temporary gain increased volume may ultimately lead to astounding losses. Consequently, the various problems connected with the marketing and selling of goods are from the financial point of view of the most vital significance.

THE COSTS OF MARKETING

The function of producing goods is primarily to give "form" utility to those commodities to which the process of marketing later gives "time" and "place" utility. Production has been carefully studied and can be measurably standardized because of the great importance of capital and machine methods in making the goods. The distribution of goods through the various marketing channels, however, has been given far less attention, and because of the importance of the purely human element in the distributing function routine standardization is far more difficult. Briefly stated, from the economic point of view *the aim of marketing should be to get the goods to the consumer with the lowest possible margin of increased cost between the original producer and the ultimate consumer, consistent with satisfactory service.* Because of the enormous expense of marketing, as compared with the production of goods, any reduction in the costs of distribution will ultimately have a very marked effect upon the cost of living. In the long run more effective marketing methods and lower costs will mean higher profits for the producer or dealer as well as lower prices to the consumer.

Sometimes it is not generally recognized how large a propor-

tion of the ultimate selling price of commodities is due to the costs of distribution. In the case of agricultural products it frequently happens that the farmer receives for his product not more than 25 per cent of the price paid by the consumer. The wide margin between cost and selling price is accounted for by the expenses of packing, shipping, storing, wastage, deterioration, handling by middlemen, and distributors' profits. It has sometimes been stated that on the average nearly half of the selling price of all goods is accounted for by marketing expenses and profits. There are, however, wide variations in this matter, depending upon the nature of the commodity sold. Some 10 years ago it was stated that the selling cost of a well-known make of typewriter was five times its cost of manufacture, the latter including the cost of material and factory operations. There are times when even salesmen's commissions amount to 50 per cent of the list price of goods sold, while a 30 per cent or 40 per cent commission is very frequently given to canvassing agents. The selling expenses of specialties may vary from 15 per cent to even 60 per cent or more of the selling price. Some staples, on the other hand, are sold at a total selling expense from producer to consumer of not more than 10 per cent of the net sales price, the expense being regulated by the channels of distribution used.

For certain lines of goods, the more direct is the channel of distribution from producer to consumer, the lower will be the selling expense. In other lines the experience is quite the reverse. However, every time goods are handled by a middleman there must be an increased "mark-up" to cover his profits, and the successive handling of a commodity by various dealers, wholesalers, jobbers, and retail distributors, frequently leads to a progressive and cumulative increase in the ultimate price to the consumer, very much in accordance with a compound interest formula.

It must not be supposed, however, that as a rule any considerable part of the increased prices to the consumer is the result of unduly high profits to the middleman. On the contrary, whenever profits tend to grow high competition cuts them down.

TABLE 59

DISTRIBUTION OF CONSUMER'S DOLLAR BETWEEN RAW MATERIALS, MANUFACTURER, WHOLESALER, AND RETAILER

(Based on 1924 data)

Commodity	Supplier of Materials to Manufacturer	Manufacturer	Wholesaler	Retailer
Meats	65 Cents	11 Cents	5 Cents	19 Cents
Groceries	54	18	9	19
Hardware	21	39	15	25
Shoes	30	28	14	28
Auto accessories	31	24	19	26
Drugs	19	36	11	34
Jewelry	24	25	13	38
Furniture	22	26	12	40

In addition, Table 88, page 813 (Appendix) indicates some of the significant items of distribution expense in connection with three or four wholly different types of commodities. The figures should not be taken as by any means absolute. Rather they are merely indicative. The chief expenses connected with the marketing of goods are, first of all planning and investigating, advertising, shipping, delivery, carrying and storage, deterioration, loss through breakage, wastage and the like, compensation of salesmen, and credit extensions. Some of these expenses would inevitably be incurred under any form of distribution which might be devised. However, other expenses could be greatly reduced through the adoption of more scientific methods of distribution.

ELIMINATING THE MIDDLEMAN

In this connection particular attention has been directed to the supposed advantages arising from the "elimination of the middleman." Obviously, if the middleman is eliminated it will be necessary for producers of goods to deal directly with the consumer. Yet experience has shown that in many cases the price to the consumer cannot be reduced in this manner. As a result of the increasing division of labor and the more definite specialization of functions in industry, the middleman has arisen to fill an economic need. His task is to bring together the consumer and the producer of goods. His chief function is

to sell. He has specialized on marketing problems. In many instances he removes from the producer the very great risk which might otherwise be incurred through selling to a large and miscellaneous assortment of consumers. The producer frequently finds that the division of interests and the increased expense which result from direct distribution may become a serious financial handicap.

To make the matter clear, some of the more important functions performed by the wholesaler are here summed up:

1. *Products are assembled* from various sources into a central reservoir from which distribution is made to suit the retailer's needs, both as to time of delivery and quantity of sale.

2. The *storing of goods* thus collected until they are sold is generally an important function, adding "time" as well as "place" utility to the output of the manufacturer.

3. *Grading, sorting,* and *selling* in *smaller lots* than could profitably be handled by an individual manufacturer, are definite functions of the jobber in some kinds of business.

4. Unquestionably, the wholesaler in many lines performs a definite function by *assuming risks of price* fluctuation and anticipating the needs of his customers.

5. It is probable that the wholesaler with his intimate knowledge of conditions among retailers and among producers helps to *stabilize both production and marketing*. This means lower costs to the ultimate consumer.

6. The wholesaler also helps to *maintain competition* by dealing with different producers. His competitive purchasing acts as a stimulus to lower costs. His buying power aids the retailer.

There are, of course, certain types of industry which can efficiently deal directly with the ultimate consumer, and there are certain types of goods which must as a rule be sold directly by the manufacturer to the retailer or consumer. Such cases, however, seem to be relatively rare.

The need for the wholesaler's services is found primarily in the distribution of what may be called "convenience goods" or "staples." Such goods have a ready sale, in large quantities, at frequent intervals, in easily accessible stores. On the other hand, (1) when the product is highly perishable, (2) when the goods are subject to rapid and frequent style changes, or (3) when the thing sold calls for special technical skill in the in-

stallation and operation, there is frequently a very good reason for dealing directly with the retailer or ultimate consumer.

As it happens, *many different methods of distribution are used, even in the same industry*. But even when the middleman may seem to be eliminated, the wholesaling or jobbing *function* usually continues to be performed, either by the producer, through separately organized distributing houses, or by the large retail purchasers, such as chain stores, who buy in large quantities, store, distribute from a central point, and assume risks ordinarily taken by the wholesaler.

The *wholesaler* or *jobber* can survive only so long as he performs a useful function. In actual practise some groups of producers, as for example the California Fruit Growers' Association, have found it both possible and profitable to eliminate the middleman. Similarly, some large manufacturing concerns distribute their product directly to retailers, though much less frequently to the ultimate consumer. In most cases, however, it is rather difficult to demonstrate that any actual saving has resulted to the producer from the adoption of this method. It is still more difficult to ascertain that the ultimate consumer in whose welfare the theorist is most interested, gains anything whatever from the practise. Even though there should be a reduction in the costs of distribution in this manner there is no assurance that the consumer will *immediately* be the gainer. Much will depend upon the type of commodity marketed, and the extent of the monopoly in distribution which may result through the control of the channels of trade by associations of producers.

Waiving the financial considerations involved in the elimination of middlemen, whose industrial existence is due to the fact that they perform a most important economic function, it is undoubtedly true that the costs of distribution might be greatly lowered through the elimination of many expenses which are obviously largely the result of *competition* in selling. On the other hand, it is well to remember that competition itself, though leading to much duplication of effort and expenditure, may also lead to better service, improvement of product, and development of new processes which ultimately mean lower costs and lower prices. Some of the alleged wastes resulting

from competitive selling are due to expenditures for advertising, delivery of goods, the use of fancy containers, the undue extension of credit, and so forth. The question of advertising and its financial significance will be given special attention in the latter portion of the present chapter.

At this point it may be noted that the delivery expense is normally a very low proportion indeed of the selling expense, and is due solely to the demands of the consumer. Likewise the increasing use of packages and expensive containers is largely the result of the consumer's demand. Package goods are not only more convenient for the customer, but are also handled at less cost by the dealer. Further, from the producer's point of view, selling goods by this method results in wide advertising which may lead to considerable financial gains. The customer also gains through a certain guaranty of quality which is indicated by branded package goods.

One of the most important wastes in marketing goods, which increases the price to the consumer without conferring any corresponding gain on the producer, results through breakage, wastage, spoiling and general deterioration between the source of production and the place of ultimate consumption. The losses of this sort are particularly great in connection with the marketing of food products, whether in the raw state or in manufactured form. These losses arise through numerous causes, and may be generally summed up as follows:

(*1*) Losses on the farm itself; (*2*) losses due to unsatisfactory packing; (*3*) losses arising from the lack of proper facilities for shipping; (*4*) shortage of properly equipped cars for transportation; (*5*) improper loading; (*6*) losses through irregularity and delay in transportation; (*7*) damage and deterioration from heat, cold and lack of ventilation; (*8*) losses through rough and negligent handling; (*9*) lack of proper facilities at freight terminals; (*10*) further loss and breakage in carting; (*11*) improper or inadequate warehousing; (*12*) defective and wasteful marketing methods after goods have reached their ultimate destination; (*13*) failure to regulate the seasonal supply of goods through proper planning and storage, which results in periodic market "gluts."

SOME PRICE PROBLEMS

In discussing the financial aspects of selling goods it is important to avoid generalizations. In some respects each industry must be considered as a separate unit. Some of the considerations which must be borne in mind in studying the marketing problems of different concerns are the following:

1. The *stage in production* at which sales are made is frequently of much significance. The selling problems of the manufacturer will be in many respects far different from those of the trader, whether wholesaler or retailer. The problem of financing sales is much different for the producer of raw material than for the assembler of partially finished products.

2. Practises necessarily differ widely in different *lines of industry,* even though the stage in the productive process is the same. This may be due partially to custom and partially to necessity, depending upon the nature of the use to which the product is put.

3. The *location* of the seller with reference to his market is another factor of much importance. Expenses of selling increase and methods of sale change when the producer is far removed from the natural outlet for his goods.

4. Closely related to the above consideration is the *scope of the market* and the type of customers to whom an appeal is made. Policies must be changed as the market widens from the immediate locality to a state and nation-wide or an international market.

5. The *size* of the selling organization frequently exercises a determining influence on marketing and financial policies. Methods can be followed by the largest unit which are quite impossible to the smaller, even in the same line of industry. Various classes of selling expenses change markedly with changes in size.

6. Of even greater importance and closely related to the foregoing are the *channels of distribution* through which goods are sold.

(*a*) The product may be marketed through branch agencies controlled by the producer, or may be sold to exclusive agents. In such cases the price may be definitely controlled. (*b*) Goods may sometimes be sold on *consignment* through regular dealers, or more commonly they will be sold outright to the dealers. (*c*) Again, it is the practise of some companies, even in the same line of industry, to distribute direct to the retailer or even to the consumer, while other concerns engaged in the same business sell only to wholesalers or jobbers. Many sell both to wholesalers and retailers. (*d*) Finally, in many lines of business it is the custom to make goods only to order, while in other lines or at other times goods are made in advance of the receipt of orders. These different practises frequently lead to vast differences in matters of selling price and credit extension.

7. The nature of the commodity sold is perhaps even more important than anything else in its effect on the marketing and pricing policy. Such considerations as the following are significant.

(*a*) Is the product a new one, or an old one? (*b*) Is it a staple or a luxury? (*c*) Is it fashional and subject to style changes, or is it standard? (*d*) Is the product subject to a seasonal demand, or is it an all year round product? (*e*) Is the product naturally available at all periods during the year, or only at certain seasons? (*f*) Is it perishable or non-perishable? (*g*) Is it bulky or compact? (*h*) Is it highly valuable per unit or relatively cheap? (*i*) Is it customarily sold in large quantities or in small quantities? (*j*) Is it a manufactured product, or a raw material? (*k*) If a raw material, to what class does it belong? (*l*) Must the commodity be bought in certain quantities irrespective of price, or are there satisfactory or possible substitutes?

From the above suggestions it is evident that the sales department of an organization, in order to handle its problem satisfactorily must do a great deal of planning. To gain a thorough knowledge of the market, the one in charge of sales must have an intensive knowledge of the goods which are to be

sold, and must understand the peculiar financial problems and needs of his particular business as well as the aims and future plans of the business. He must also take into consideration the possible trend of future prices as well as the present price situation. The constant aim of the selling department should be not merely to increase volume, but to *increase net profits*, not to do all the business there is, but to do *profitable* business. It is, of course, understood that there are times when immediate profits must be sacrificed for future but certain gains, and at all times *service* should be considered as even more important than immediately high financial returns.

INFLUENCES DETERMINING THE PRICE POLICY

What determines a company's price policy? Obviously, many of the determining factors vary from industry to industry and from one concern to another in the same industry, as a result of such differences as have been indicated. However, there are a few underlying principles which must be considered in all cases. The selling price of a commodity must first cover the cost of manufacture, including material, labor and overhead, as well as administrative and selling expenses. There should then be a sufficient margin after all of these expenses are deducted, and after allowances have been made for ample depreciation, taxes, interest, and the like, to yield the seller a profit which is ordinarily considered "reasonable" for a business subject to the particular degree of risk. Without quibbling regarding the economic theories involved, this profit may be regarded as covering not merely a "fair return" on the owners' capital, but also an additional amount as compensation for the *risks* which have been assumed by the owners in the capacity of *entrepreneurs*. Accordingly, the margin of profit aimed at in certain lines of business will normally be very much higher than that which is expected in other lines. The "pricing" policy will, therefore, be much influenced by the degree of "risk."

Further, the *conditions of production* under which the commodity is made will have a good deal of influence upon the

price policy which can be followed. If production is carried on under conditions of increasing cost or diminishing returns, it would very obviously be folly to attempt to increase sales by keeping the price as low as possible. On the other hand, when production is carried on under conditions of decreasing cost or increasing returns, there may at times be a very definite gain in increasing the volume of sales by means of a decrease in prices, so that larger aggregate net profits can be made, even though the profit per unit of goods sold is less than if higher prices had been maintained.

Also, the nature of the *demand* must be carefully considered. If a commodity is subject to an "inelastic" demand, changes in price may have no particular effect on the number of units which can be sold. On the other hand, if the demand is "elastic" a very nice problem of calculation may arise as to what price policy will yield the highest net returns. There is at all times this interplay of conditions of cost and conditions of demand.

It must not be supposed, however, that the commonly stated economic theory to the effect that the selling price tends to settle at a point which represents the cost of production to the marginal producer, or to the most efficient producer of the goods, is literally true. This, no doubt, is a "long run" tendency, but the theory applies to a static rather than a dynamic state of affairs. The business world, however, is most "dynamic." Conditions constantly change. When the "long run" has arrived, a wholly new basis of costs has also been reached. There is higgling and bargaining and adjustment which cannot be reduced to any definite *formulae*.

The market phenomena of price frequently show extremely wide variations from any rules which the armchair theorist may have laid down, though a careful study of these principles is very valuable for purposes of guidance. At all times some goods are sold below the cost of production, whether voluntarily or involuntarily. Further, in certain lines of business there are probably occasions when all goods are being sold far in excess of their cost of production, due to psychological and other considerations. It is frequently possible to increase the

sale of goods by *increasing* the price and appealing to the vanity or the fear of the customer. When prices were tending rapidly upward toward the end of the war period, many dealers increased their volume of sales, at enormous profits, by persuading customers that the price would rise still higher. On the other hand, when prices began to drop, there were many instances in which trade was lost altogether as a result of price reductions. The customers decided that if prices were dropping they would drop still further, and that goods might be purchased more profitably at some future time.

Such is the play and interplay of forces which appear at all stages of the business cycle and which vary in their effectiveness from industry to industry. In a measure it is true to say that the law of price is as variable as is human psychology. And, after all, it is the customer and not the producer who sets the price.

To sum up the matter very briefly, such considerations as the following must be carefully weighed when the seller puts a price on his goods.

1. What do the goods *cost* delivered to the customer, allowance having been made for all items of expense and a reasonable profit? As a general principle, no concern is justified in selling at a loss. Exceptions to this rule will be noted in a moment.

2. What does the *competitor* charge for similar goods, and what does it cost him to produce? Many a business has ruined itself by attempting to sell at a price made by a competitor who did not know his own costs of production. In certain well-established lines of industry it may be absolutely essential for a new seller to accept the price standards set by those already in the field. If so, his problem is greatly simplified.

3. The considerations just mentioned will enable the seller to determine whether he can afford to do business. After this point, it is essential to consider the *customer* and his needs. What are the conditions of *demand?* Can a sufficient amount of the goods be sold at a price necessary to enable the business to be carried on? It will be most important to study the

demand, not only in a general way as to its *elasticity* or *inelasticity,* but also with specific reference to the peculiarities of prospective purchasers. For example, what class of customers are to be appealed to? What is their prevailing psychology? What is their standard of living? What are their customs and prejudices?

Many a hopeful business has been wrecked by neglecting to make allowances for some of these psychological factors which have no relation whatever to questions of cost or of the abstract theories of demand and supply. The producer can by no means be sure that certain classes of customers will buy his goods, even though the price is right and even though apparently they might *need* goods similar to those he has for sale. There may be national, religious, racial or political prejudices which will completely unbalance the most carefully laid plans that have failed to consider these intangible but most powerful elements in the situation.

4. Closely related to the foregoing consideration is the question of *quality* and *service.* "Quality" may be either tangible or intangible so far as it relates to the sale of a particular commodity. What people can be made to think of a product is frequently far more effective in influencing its selling price than the real quality as measured in terms of usefulness or durability. The appeal to the imagination is frequently the most effective appeal to the pocketbook. Particular individual services rendered in connection with the sale of the goods may enable a price to be secured which is very much out of line with the actual cost of production.

5. Naturally, there are very many other considerations to be borne in mind. Most of these, however, are in some way related to the foregoing.

(*a*) It should, perhaps, be noted that certain types of seasonal goods will normally be sold at a price which is apparently very high as compared with the actual cost of production, due sometimes to unusual risks undertaken by the seller. The same consideration may apply in connection with highly "fashional" products. (*b*) Also, the customary or possible rate of turnover will sometimes markedly affect the

price. Where the annual turnover of goods, from the nature of the case, must be very low, it frequently happens that a price is made and maintained which represents a good deal of "insurance" charged by the seller over and above all actual expenses. (*c*) Similarly if the customary terms of sale are long, the price must be increased in order to provide sufficient interest on capital invested in receivables as well as to insure the seller against the additional "risks" which result from the extension of longer credits.

Having made some of the analyses here indicated, the seller of goods must determine in his particular case whether he wishes to sell (*a*) below the market, (*b*) at the market, or (*c*) above the market. In the former case his aim will be to undercut competitors and make larger net returns through a small margin of profit on a larger volume of units sold. If the second policy is followed it will be necessary to adopt some method of differentiating the product from similar ones already on the market. This is the easiest method to follow, but may not lead to any particular degree of success unless the product is very vigorously pushed by advertising. When the conscious attempt is made to sell goods at a higher price than is commanded by those of a similar quality now on the market, it is necessary to emphasize certain distinctive features. There must be something special about the goods which will attract the interest of the consumer, even though the actual quality is no better than could be secured at a lower price. In such cases advertising must be extensively used.

Upon the whole the business man in attempting to arrive at the most profitable price for his goods thinks more of "consumer's surplus," as the economist terms it, than of the mere interplay of "demand and supply." He knows that there are many buyers who can, and will, pay a much higher price than could be secured from the mere "marginal" purchaser. He may, therefore, find it much more advantageous to appeal to these "intra-marginal" customers until competition forces his prices downward.

WHEN IS IT PROFITABLE TO SELL BELOW COST?

Obviously, no concern can for any length of time sell below cost and maintain its economic existence. However, there are always some producers who sell goods below cost. Some companies make a practise of always selling certain articles at a price which is insufficient to cover the expenses of production. At times it may even be highly advantageous to sell below "cost," as the term is ordinarily understood. Some of the circumstances under which goods may be sold at a loss are as follows:

1. The producer may not know his actual cost of production. As a result of his eagerness to do business and sell a large quantity of goods, he may rapidly use up his capital without realizing his predicament until he fails. A surprisingly large proportion of all businesses are at some time or another in this class It is a malady particularly common to the newly launched enterprise. Even in the prosperous year of 1926, 197,186 corporations sold their goods or services at a loss. Probably several times this number of unincorporated enterprises were guilty of the same practise, and doubtless few of them were aware until their income tax returns were prepared that they were actually operating at a deficit.

2. When new capital can be readily secured from a too credulous public, it sometimes happens that concerns continue for years to sell their product at a loss. This has undoubtedly happened in the case of many of the metal mines, which are always "on the verge of making big profits."

3. Again, goods may be sold below cost as a result of cutthroat competition. This practise has been from time to time followed by powerful organizations with a view to crushing competitors. Millions of dollars have been lost in price-cutting campaigns of this sort, the ultimate result of which is usually an era of higher prices when competition has temporarily ceased.

4. Goods may be sold at a loss with a view to developing *prospective* good-will. It would obviously be impossible for

certain types of newly launched enterprises immediately to make a profit on the goods sold. They must wait until a sufficient volume is secured, and it would frequently be impossible to obtain this volume unless prices were kept at the point which will be ultimately profitable, but which at present makes it necessary for the producer to incur a loss. This policy may be a very necessary and wholly desirable one, provided the seller knows definitely what he is doing and can see clearly when and how profits will *ultimately* be made.

5. Some companies, again, consciously and purposely sell certain minor products at a loss with a view to retaining the good-will of their customers. The situation may result from a gradual curtailment of certain lines of goods so that they are no longer profitably produced. It may be due to influence which has been exerted by salesmen who wish to cater to the particular whims of their customers. It is possible that certain low-priced and non-profitable articles are used as "leaders" in order to facilitate the sale of other goods.

Probably all cases of this sort which result in sale below cost of production are conscious attempts to develop good-will. Each concern must be its own judge as to the wisdom of such a policy. Under such circumstances the losses incurred are regarded as a particular type of "advertising." As a rule, however, the policy is a dangerous one and can very easily grow beyond all bounds.

6. Frequently, retailers sell certain articles far below cost merely to serve as "leaders" to induce other purchases to be made. This happens particularly during special sales when a few first-class articles are distributed among inferior goods of the same sort in order to attract buyers. Another example is furnished by the "one cent sales" occasionally put on by the Rexall stores, that is, two articles are sold for the price of one, plus one cent. Such sales, of course, usually have a high advertising value, and they lead to the buying of additional products. They are particularly advantageous when prices are falling and trade is dull. They are best suited, however, to those retailers who control the source of supply of the particular goods, or who themselves manufacture the goods sold.

They accomplish their results best when the very numerous array of articles not in the one cent sale is carefully brought to the buyer's attention.

7. Closely related to the foregoing is the policy sometimes followed of selling all articles of a given sort at a uniform price, notwithstanding wide differences in size. Makers of different articles of apparel, particularly, have followed this practise, as a result of which the very small sizes may be sold at a profit while the larger sizes may even be handled at some slight loss. The theory is that the price fixed will be sufficient to assure a profit on the *average* item sold. Some companies maintain that it is much more convenient to handle the matter of sizes in this way. Any such policy is generally wrong. It is, of course, "easier" to keep no cost records and to "guess" at the price. The only safe rule in cases of this sort is to let the price of each article cover its proper costs. When the chief cost of production is for *material* used, the "uniform" price policy will probably prove particularly unwise.

8. In the case of by-products the question is a mooted one, since it is sometimes very difficult to know what by-products actually cost. Some concerns, as previously mentioned, have even sold the main product below its true cost of production because of the very high returns which they have been able to gain on by-products. Such a policy is usually unwarranted. Also, in determining the price of by-products or joint products, the estimated separable expenses should at least be covered by the price received, and there should also be an allowance for material costs equal to that which would be received if the material were sold, or which would have to be paid if the goods were bought and devoted to similar uses.

9. It has sometimes been found profitable to sell goods at a loss in one market in order to hold the price higher in another market. Such instances are found only in international trade where tariff boundaries protect. It has been argued that because of the increased economies resulting from larger scale production certain types of manufacturing concerns have found it advantageous to produce goods in excess

of the demand of the home market and to "dump" the surplus on foreign markets at a price lower than the unit costs of the entire product. The alleged justification for this practise, which is by no means so common as is ordinarily supposed, lies in the fact that by increasing the volume produced, unit costs of operation are lowered, but if no more goods are put on the home market the selling price will remain at the original level.

10. It happens in certain lines of industry that production cannot readily be evenly distributed throughout the day or throughout the year. In such cases overhead expenses continue whether goods are being actually produced or not. It may, therefore, be profitable in order to keep the plant in operation to sell goods made in the "off peak" periods at a price which is only slightly higher than the prime costs, that is, the direct labor and material expenses which enter into the specific product.

The problem of *seasonal* goods is sometimes solved in this way to the benefit of all concerned. Also the practise is recognized and generally followed in the electric light and power business, in which special low rates are made to those who use current for power, or whose demand on the plant comes at a time when there is much excess capacity available. The power business and the "off peak" business of electric lighting plants is very frequently billed at a rate per kilowatt-hour which is lower than the *average* cost of production per kilowatt-hour for *all* current sold. Yet, inasmuch as the additional sales necessitate no increased plant investment and practically no additional operating expense, except perhaps a little more fuel cost, it is obviously to the advantage of the company to sell current under these circumstances at a rate which will net a slight profit over and above the low *additional* cost which must be incurred to render the service.

11. It is rather interesting to note further that there are circumstances under which by selling at a loss a company may *reduce* its *losses*. It is common knowledge that in order to "break even" many factories must operate to at least 60 per cent of their capacity. The actual profits very frequently

cannot be made until the utilization of plant exceeds this ratio, the figures being used merely for purposes of illustration. This condition results from the fact that with a smaller volume of goods produced, the various supplementary costs, administration and office expenses, general supervision, depreciation, insurance, taxes, interest, and the like, are distributed over a much narrower number of units, thereby increasing the cost per unit. Even though the plant should practically cease operation, most of the expenses referred to would continue without abatement. It is obvious, therefore, that when a plant is being operated below the "profit" capacity, the *losses* may be *reduced* by selling goods for little more than the actual "direct" costs of producing those goods. Any margin thus gained will help in defraying the expenses which must be met whether the plant is operated or not. Sometimes it may be wise, in view of this possibility, for a company to sell goods under cost in order to reduce the amount of its losses. Extreme caution, however, is necessary lest the customer be led to think that the unprofitable price is the "fair" price, which in more normal times he will expect to have continued.

12. In times of rapidly falling prices it is frequently the height of wisdom to sell for less than their cost goods already produced. Thus continued shrinkage of inventory values may be avoided and possible losses curtailed. Many a concern has been ruined during the past two years as the result of its failure to recognize this important principle. The rule should be not to wait until financial necessities arise, but to "take losses" at once when prices are dropping precipitately.

13. The actual or prospective drop in the demand for a certain line of goods may lead the seller to dispose of a portion of his inventory at a loss even in normal times. Such a policy may not only prevent a greater future loss, but may also serve to "unlock" working capital already tied up in slow moving inventory. Similarly, whenever stocks become antiquated they should be "cleaned out," even at a sacrifice, in order to free the capital for other purposes. Profits can be made in business only when goods are sold and the investment is turned with reasonable rapidity. This situation explains many of the bar-

gain sales which actually *are* bargains. The seller finds it more profitable to take a loss on certain articles in order to gain a greater profit elsewhere.

14. Finally, goods are frequently sold at a loss because of the financial urgencies of the seller, irrespective of general business conditions. He may have "overstocked" himself even though his "line" of goods is perfectly satisfactory. In order to raise working capital to meet his current bills he may be forced to sell a portion of his stock at a loss either direct to the consumer or to other dealers. The final step in this direction is frequently a receivership sale, though some sellers have been able by taking a severe loss to avoid bankruptcy.

SHALL PRICES BE UNIFORM?

Many interesting questions might be raised regarding the problem of uniform prices and price discrimination. "Uniform" prices may mean many different things.

1. There may be uniformity as to all customers irrespective of their *status* or of the quantity of goods purchased.

2. The uniformity may extend only to all within a given class or group. For example, all retailers may be quoted a uniform price, while all wholesalers, without regard to the size of their purchases, may be given another rate. Such differences are commonly met with.

3. There may be uniformity as to territory supplied. The price may be the same for all customers of a given class within an entire territory, or geographical distinctions may be recognized in arriving at the price. When the transportation costs are great there must naturally be such differences, or prices must be quoted f. o. b. the factory.

4. A uniform price policy may be followed with regard to the terms of sale, that is, all may be required to pay cash or, on the other hand, may be given an equal period of time within which to make payment. Any departure will naturally result in varying prices actually being paid by customers because of the cash discounts allowed for prompt payment. The sig-

nificance of this problem will be mentioned in the following chapter.

5. Sometimes lack of uniformity results through the offering of special concessions for special services, for example, goods may be sold at a lower rate to the dealer who will take the "full line" of the seller instead of buying only one product. Again, a special price may be made to those retailers who agree not to handle the goods of a competing producer.

6. Special "off season" prices are also offered to the purchaser in some industries, and "seasonal datings" are very common.[1] Such practises lead to a further lack of uniformity.

The question of "quantity discount" is of a good deal of significance to the seller. This should not be confused with the cash discount [2] nor with the *trade discount.* The latter is a device used primarily in order to conceal the actual purchase price of goods from the ultimate consumer. Further it makes possible a uniform selling price of the product without actually fixing that price to the consumer, and is useful when sales are made at different prices to wholesalers and retailers.

The *quantity discount* is given on the assumption that large orders can be more profitably handled than small ones, and the actual discount should be carefully determined in view of actual savings which may result. In practise, it has frequently been found rather disastrous to offer quantity discounts because of the frequent abuses of the terms offered. When prices vary according to the quantity sold, it is possible that through cooperative purchasing or chain store purchases a situation may develop in which the retailer offers to the ultimate consumer a price which is as low as that which the wholesaler can offer to the retailer. The offer of quantity discounts to retailers also frequently leads to overbuying with very disastrous consequences. It is extremely important to outline a policy which will not cause mutual misunderstanding, and which will not result in unjust discrimination between various groups of purchasers. In order to avoid unpleasant

[1] See Chapter XXIII, page 684.
[2] See Chapter XXIII, page 680.

difficulties, some sellers, therefore, refuse to give quantity discounts.

Another interesting question is raised in connection with "new business" getting. Should special price *concessions* be made in order to attract new customers? Such a policy has sometimes been generally followed by the seller. More frequently the practise has been merely winked at, while salesmen have, within limits, followed their own pleasure in the matter, frequently offering special price inducements in order to increase their volume. Occasionally the salesman himself has deducted the concession allowed from his own commission. But, however the matter may be handled, this policy is almost certain to lead to difficulties and to cause misunderstandings. The practise is undignified and if generally known will reflect unfavorably upon the seller. Dissatisfaction will arise on the part of those customers who do not receive concessions. Further, if the practise is left more or less in the hands of the salesmen themselves, the possible evils are greatly multiplied because of the irregularities which inevitably arise. While there are possibly a few exceptions, any such policy in most lines of business is wholly unsound, and savors of the primitive method of arriving at market prices through direct bargaining between customer and seller. Price concessions may sometimes be justifiable in pushing new lines of goods with old customers. They should not ordinarily be given, however, merely to get *new* customers.

Again, another interesting problem arises: Should the producer sell to only one customer or to a very small group? Much, of course, depends upon the nature of the business and the relation between the buyer and seller. Obviously, the seller can afford to dispose of his goods at a lower price if his selling expenses are in this manner cut down. It is dangerous, however, to sell the entire output to one customer unless a very definite contract is made which will be subject to renewal under mutually satisfactory conditions which will protect the interests of the seller.

In the meantime the contract should provide for some sliding scale arrangement whereby the price agreed upon might

be subject to adjustment in accordance with the general trend of prices for a similar commodity. Otherwise a seller may be in danger of finding himself wholly in the power of the buyer who may force deliveries at unprofitable prices or may refuse to renew the contract after special investment has been made in order to meet his needs. The dangers to the seller are greatly increased if, as is frequently the case, he does not use his own name or brand when selling in large quantities to a limited number of purchasers. When no distinguishing marks are used, no good-will or independent market for the product can possibly be developed.

PRICE GUARANTIES

Another important consideration has to do with the *guaranty* of the customer by the seller against decline in prices after orders are received or goods are sold. Such guaranties are very common in some lines of industry and may be made under any one of the following conditions:

(*1*) The guaranty against decline may hold good until the date of shipment of an order which has been received for future delivery. (*2*) The guaranty may extend until the date of delivery. (*3*) The guaranty may extend to a fixed date. (*4*) The guaranty may cover the period which must normally elapse until goods are sold. (*5*) The guaranty may sometimes refer, not to the selling price of the purchaser, but to the future selling price of the one who gives the guaranty.

Ordinarily this guaranty means that when a manufacturer disposes of a commodity at a stated price he obligates himself in the event of a decline in price to rebate to the purchaser, at some future date agreed upon, the difference between the stated price at the date of sale and the reduced price at which the purchaser may be obliged to resell between the date of sale and the agreed-upon date of settlement. When the practise is confined merely to a guaranty which shall end with the date of shipment or of delivery, no serious problems arise. When the guaranty extends beyond this date, however, it is obvious that the responsibilities of the guarantor may become of major significance.

Some of the customary arguments alleged in favor of the price guaranty practise are as follows:

1. Such guaranties are, from the manufacturer's standpoint, desirable because: (*a*) Sales are increased thereby. (b) Seasonal fluctuations can be avoided, due to the advance orders which are secured. (*c*) Goods can be shipped as soon as finished, thus avoiding warehouse expenses. (*d*) Larger orders can thus be secured. (*e*) Payment is frequently made at an earlier date than would otherwise be the case. (*f*) Cancelations are prevented in a falling market. (*g*) Market prices in general tend to be stabilized by this practise.

2. The arguments favoring the practise from the wholesaler's or retailer's point of view are such as follows: (*a*) The guaranty protects them against loss due to a falling market. (*b*) It encourages them to place their orders early and thus avoid delays in shipment. (*c*) It permits the handling of goods by the wholesaler on a smaller margin of profit because of the reduction in risk. This makes possible a lower price to the consumer.

Some of the opposing arguments are as follows: (*a*) It is unfair to the manufacturer to be expected to protect the wholesaler or retailer in this manner. Since the manufacturer himself is not protected, he cannot afford to assume the risk for those who purchase from him. (*b*) The practise may tend to keep prices high in a wholly artificial manner. (*c*) The manufacturer may, as a result of this practise, be encouraged to produce in excess of the probable demand for goods on the part of the ultimate consumer. Due to the readier sales to the middleman he may be wholly misled as to the actual market conditions. (*d*) The middleman, in turn, may recklessly overbuy because of the carelessness which results from price guaranties.

Obviously there are many sides to the problem, and it is interesting to find that there is wide disagreement on the question among manufacturers, even when engaged in the same line of industry. From the seller's point of view, the policy of guaranteeing against price declines is probably most feasible when the raw material cost is a very small part of the producer's

selling price. Under such circumstances the fluctuations in market price will probably be less rapid or violent. However, the customer in such cases would have least need of the guaranty. On the other hand, it has been maintained by some manufacturers that prices should be guaranteed to customers in those products in which the fluctuation will probably be most rapid, as for example, in those commodities in which the cost of raw material plays a very important part. Naturally, the buyer of goods would particularly favor a guaranty under these circumstances.

No definite rules can be laid down with reference to this most interesting problem. Much will depend upon the nature and customs of the business itself, the type of customers served, and the usual terms of sale in the trade. The practise may possibly prevent violent price fluctuations in certain lines of trade. It may also lead to a more even distribution of orders throughout the year. In such cases, the policy would seem to be wholly desirable. In times of uncertainty, however, many new elements enter into the situation. If mutual benefit is received by buyer and seller, the practise justifies itself. If, on the other hand, the risks are all on the side of the guarantor, it will obviously be necessary for him to increase his prices in order to insure himself against losses which may be incurred through his guaranty to the buyer.

GUARANTIES OF QUALITY

Somewhat related to the question of price guaranty is the guaranty of the *quality* of the product sold. Such guaranties usually extend to the ultimate consumer, who, in securing adjustments, may deal either directly with the producer of the goods or indirectly through the middlemen from whom he has bought. This guaranty may extend for a definite period of time after goods are purchased or for an unlimited period. The guaranty may be conditional or absolute. It may provide for the furnishing of a new article in place of an old one which has been found unsatisfactory, or it may merely provide for the free repair of the original article. Sometimes an actual

money guaranty is made against the performance of a certain amount of service by the articles sold. Very commonly the retailer may allow a dissatisfied customer to return goods which he has purchased and secure a refund of the purchase price. Such a policy, however, could scarcely be followed between the manufacturer and the middleman himself, though during the recent period of almost universal cancellation of orders and return of shipments, many a retailer and many a wholesaler have assumed this privilege. The possible extent of the use of such guaranties is almost unlimited.

Obviously, this practise is open to a great deal of possible abuse. Many concerns, because of the nature of their product, are not confronted with the problem. Clearly, this policy could not profitably be followed when the articles sold are of very small value. However, since the aim of the practise is to insure the satisfaction of the customer and increase the good-will of the business, one thing is certain: if guaranties or allowances of any sort are made, they should be as nearly as possible unconditional and the word of the customer should always be taken at its face value. Otherwise irritation and antagonism will probably result which will injure the business instead of increasing its good-will.

PRICE MAINTENANCE

It is scarcely consistent with the plan of the present volume to discuss the question of *price maintenance*, intensely important though it be. Obviously, in spite of any theories to the contrary, the manufacturer has a real interest at stake in endeavoring to bring it about that his product will be sold at uniform prices to ultimate consumers under similar conditions. Briefly stated, "price maintenance" refers to the policy sometimes followed by the manufacturer of placing restrictions upon the price at which a purchaser may re-sell an article which is identified by some brand, copyright, trade-mark, or the like. Formerly this practise could not extend far, inasmuch as probably the greater part of all goods sold was not identified in this manner. Recently, however, trade-marked and package goods have been rapidly increasing.

From the manufacturer's point of view such price protection

is perhaps sometimes needed in order to prevent the re-selling of his goods at a low price for advertising purposes. Frequently, large purchasers have bought branded goods in quantities and have sold them at a low price with a view to injuring the business of the producer. The manufacturer also alleges that the fixing of a uniform price to be charged the ultimate consumer prevents overcharging, and much ill-will which might result from the lack of a uniform price on the same branded goods. There is, of course, much to be said in favor of this contention.

The law dealing with the question of price maintenance is yet somewhat uncertain, inasmuch as many conflicting decisions have been rendered. Probably, however, there has been far too much excitement about the problem. Obviously, if trade-marked goods are not found by the customer to be satisfactory and worth the money which he pays for them, he will buy in preference a non-branded article or the advertised goods of some other producer. It would seem, therefore, that so far as the public interest is concerned, the question might in most cases be left to work out its own solution under competitive conditions.

Another interesting development is that of the "open price" association, the primary purpose of which is to assure the maintenance of uniform prices within a given industry. The single price is arrived at through open discussion and interchange of information without any attempted coercion. To the extent that prices can be stabilized at a reasonable level through such activity, the open price association is to be commended. They may serve a particularly useful function in disseminating helpful information regarding costs of operation and methods of business among the producers in a given industry.[1]

THE STOCK TURNOVER IN RELATION TO PROFITS

Much attention is being given to various methods of "speeding up" the sales or "increasing the turnover." By "turnover" is ordinarily meant the number of times which the average

[1] The recently formed Copper Institute seems to be a good example of an organization formed for controlling prices through control of output, by methods which have not yet (1929) been proved illegal.

inventory is "turned over" or sold within a year.[1] In order to find this ratio, the cost of sales must be divided by the average inventory *at cost* in the trading business. If the cost of sales cannot be ascertained a close approximation may be reached by increasing the average inventory figure by the percentage mark-up which the seller puts on his goods. This "mark-up" should be based on the *selling price*.[2] Thus the ratio of net sales to the average inventory at *selling price* can be found. In a manufacturing business the true turnover would be found by dividing the actual cost of material which enters into the goods sold during the year by the material *cost* of the average inventory carried. If the average inventory is known, the cost of material can be roughly ascertained by assuming that it is 60 per cent of the annual net sales. This is merely a common ratio for all manufacturing industries in the United States. The calculation can be made for specific industries by reference to Table 47 and Table 26.

From the study of a balance sheet it is difficult to ascertain the average value of inventory carried unless the business is wholly free from seasonal fluctuations of every sort. Frequently stock is taken and financial returns made when the inventory is low, and hence the balance sheet figure may be

[1] For other aspects of "turnover," the reader is referred to Chapter XIII, pp. 323, 324. For the sake of convenience some points developed in the preceding discussion are here repeated.

[2] Obviously the reason for insisting that the "mark-up" shall be on the basis of the proposed selling price is due to the fact that otherwise the seller is in danger of deceiving himself as to his real costs of operation. In distributing the "sales dollar" received, the various proportions of expense as well as profits realized must always be estimated on the basis of "gross income" received. Since, therefore, percentage "costs" can conveniently be arrived at only through a study of the "gross income," the seller should regard the actual cost of his goods as being less than the desired selling price by a percentage of the latter which is sufficient to cover all expenses of operation whether direct or indirect, together with the desired rate of profit on sales. If, for example, as happens to be the case in the retail jewelry business a gross profit on sales of about 40 per cent is commonly expected, to cover all expenses plus reasonable profits, the average article which costs 60 cents should presumably be priced at $1.00 and an article which costs $1.00 should correspondingly be priced at $1.66⅔.

An examination of Tables 45 and 46 will throw much light on the average "mark-up" found in various lines of retail and wholesale trade. For the entire United States, according to the figures tabulated by the Commissioner of Internal Revenue, for trading corporations as of the year 1919 the average "mark-up" was almost exactly 22 per cent of the selling price. This would, of course, be not far from 30 per cent on the cost price.

wholly misleading. Sometimes a fair approximation can be arrived at by taking the mean of the high and low figures for the year. Even when no wholly accurate or absolute figures are available, it is still very useful to compare the inventory reported with the annual sales, even though the cost of sales cannot be ascertained. In this manner much light can be thrown upon the comparative conditions and policies of different establishments in the same industry.

TABLE 60

EFFECT OF STOCK TURNOVER ON EXPENSES AND PROFITS OF RETAILERS

(*Net Sales = 100 per cent*)

Trade	Rate of Stock-Turn (times per year)		
	Low	Medium	High
Groceries (1924)			
Stock-turn	Less than 7.0	7.0 to 11.9	12.0 and over
Gross profit rate	20.3	19.6	19.7
Expense rate	19.7	17.6	17.4
Net profit rate	0.6	2.0	2.3
Auto Accessories (1923)			
Stock-turn	Less than 3.5	3.5 to 5.4	5.5 and over
Gross profit rate	28.2	24.4	21.3
Expense rate	28.4	23.1	19.3
Net profit rate	− *0.2* (*loss*)	1.3	2.0
Department Stores (1924) ($1,000,000+)			
Stock-turn	Less than 3.0	3.0 to 3.9	4.0 and over
Gross profit rate	32.9	31.9	31.7
Expense rate	32.1	29.9	28.4
Net profit rate	0.8	2.0	3.3
Shoes (1923)			
Stock-turn	Less than 1.4	1.4 to 2.1	2.2 and over
Gross profit rate	28.5	28.9	29.7
Expense rate	30.6	27.4	25.7
Net profit rate	− *2.1* (*loss*)	1.5	4.0
Jewelry (1924)			
Stock-turn	Less than 0.8	0.8 to 1.1	1.2 and over
Gross profit rate	42.0	37.9	38.1
Expense rate	41.5	37.0	35.1
Net profit rate	0.5	0.9	3.0

A rapid turnover of stock is ordinarily supposed to indicate good financial management. The business which has a quick turnover naturally ties up a smaller proportion of capital in inventory than the concern whose turnover is slow. In some lines of business, however, profits are high, even though turnover is low. Other things being equal, it is to be expected that a business with a rapid stock-turn will be making higher profits

than another company in the same line of business which has a lower turnover.

The accompanying tables throw interesting light on this problem (60 and 61), and tend to show that in the retail business and usually in the wholesale business minimum expense rates and maximum net profit rates are found in those companies with the highest turnover of inventory.

TABLE 61

EFFECT OF STOCK-TURN ON EXPENSES AND PROFITS OF WHOLESALERS

(Net Sales = 100 per cent)

Trade	Rate of Stock-Turn (times per year)		
	Low	Medium	High
Automotive Equipment:			
Stock-turn	Less than 3.0	3.0 to 3.9	4.0 and over
Gross profit rate	26.4%	24.4%	24.0%
Expense rate	25.5	22.8	22.0
Net profit rate	0.9	1.6	2.0
Dry-goods:			
Stock-turn	Less than 3.0	3.0 to 3.9	4.0 and over
Gross profit rate	18.2%	17.8%	16.6%
Expense rate	18.2	16.3	15.1
Net profit rate	0.0	1.5	1.5
Drugs:			
Stock-turn	Less than 3.4	3.4 to 4.3	4.4 and over
Gross profit rate	17.2%	17.5%	16.4%
Expense rate	16.3	15.7	15.0
Net profit rate	0.9	1.8	1.4
Groceries:			
Stock-turn	Less than 4.5	4.5 to 6.9	7.0 and over
Gross profit rate	11.7%	11.4%	10.9%
Expense rate	11.7	10.7	9.9
Net profit rate	0.0	0.7	1.0

It must not be supposed, however, that the mere speeding up of turnover of stock will in itself lead to higher profits. On the contrary, it must be remembered that profits are actually not made until bills are paid, nor is a profit made unless the cost of goods and all expenses of conducting the business have been more than covered by the price received. It is possible to speed up the turnover by selling goods at a low price. It is also possible to increase the turns by intensive and expensive methods of selling which more than counterbalance any gains which come through greater volume of sales. Obviously, there is in each business a point beyond which it is not finan-

cially profitable to attempt to secure a larger volume of sales. The point of diminishing returns is reached when the added

TABLE 62

THE ANNUAL TURNOVER OF STOCK IN RETAIL STORES

A. GENERAL RETAIL STORES[1]

Business	Stock Turnover	Percentage Cost of Doing Business (on Net Sales)
Groceries:		
Independent	10	18%
Chain (estimated)	8	14
Specialty	5	32.1
Auto: Tires and Accessories	4.5	23.3
Department Stores:		
Over $1,000,000 sales	3.5	30.1
Under $1,000,000 sales	2.3	28.2
Hardware	2.3	24.4
Drugs	2.3	27.6
Shoes	1.9	27.4
Jewelry	0.9	38.3

B. TURNOVER OF STOCK IN DEPARTMENT STORES[2]

Type of Goods	Stock Turnover	Type of Goods	Stock Turnover
Notions	9	Hosiery	4
Corsets	8	Gloves	3.5
Women's ready-to-wear clothing	6	Dress goods	3.2
		Silks	3.1
Wall paper	4.2	Domestics	3
Men's furnishings	4.2	Carpets	1.5
Underwear	4.1		

C. TURNOVER IN REXALL STORES

Type of Goods	Stock Turnover	Type of Goods	Stock Turnover
Soda water	52	General merchandise	8
Candy	20	Total Store	10
Cigars	15	United Drug Company (1927)	3.25

[1]Table A is based on the result of various surveys, mostly covering the year 1924. The figures should be regarded as "common" rather than "average."

[2]The annual average turnover of the above lines of stock in several hundred department stores has been estimated by the Bureau of Business Standards of the A. W. Shaw Company.

cost of selling is greater than the added profits which result from more frequent sales. Perhaps the surest and easiest method of increasing turnover is to buy "light" and carry only the absolutely necessary amount of inventory at all times.

The preceding tabulation (Table 62) throws interesting light on the average turnover of specific commodities in retail stores. In individual cases the figures may be widely different from those here given. There is little consistency between the maximum and minimum spread which will be found in different stores and different localities.

Attention should be called to the fact that the volume of sales may be increased by extending unduly long terms to customers or by selling to customers whose credit is doubtful. In either case, capital which had formerly been tied up in inventory will now be tied up in receivables. The strength of the current position will in consequence be exaggerated. It is, therefore, important to note the *turnover of receivables* as well as the turnover of inventory. When the customary terms of sale are known, it is possible, as has been earlier pointed out, to determine instantly whether a company's accounts receivable are too "slow." The turnover of receivables, again, can be increased without any change in the terms of sale by more careful collection methods and more cautious extension of credit. By shortening the terms of sale or selling only for cash the average amount invested in receivables would be greatly reduced or even eliminated. As a result of this policy, however, there might be some immediate loss in volume of business, and hence a decrease in the turnover of inventory. Evidently there is here an interesting interplay of the various factors which must be reckoned with in every selling program.

It is frequently interesting to compare the total capital of a business with its annual sales. Thus it is possible to determine the activity of the entire investment, and to discover whether or not the business as a whole is overexpanded. Naturally the ratio of annual sales to investment will differ widely in the various industries. In an earlier table (Table 47) the average rate of capital turnover in the leading manufacturing industries in the United States is given. The ratio of net income to

"capital" (not capital stock) can also be profitably compared with the ratio of annual sales to "capital" in the table referred to. In general, it appears that the net income tends to increase as the capital turnover increases, though the rule is by no means universal. For example, in 1909, the chemical industry reported an annual capital turnover of only 0.76 times with a net income of 15.5 per cent, whereas in the slaughtering and meat packing business the turnover was 3.58 times, and the net income was 14.1 per cent. Other computations may be made which show the rate of turnover of "working capital" (see Table 24.) When this ratio is high, a concern is obviously doing a large amount of business on a small margin of free capital. In itself, however, this figure does not convey a great deal of information of definite significance. For comparative purposes it may be of great importance.

Financial Aspects of Advertising

One of the most mooted expenses in connection with the sale of goods is the cost of advertising. Some ardent advocates of a liberal advertising policy maintain that money spent in this manner should be regarded as an "investment" and not as an "expense." They base this claim upon the assumption that advertising creates good-will and that good-will is a capital asset. Obviously no rational accountant or financier will agree with this point of view, because of the very transient nature of good-will which is based solely on advertising.

There are many exaggerated notions regarding the relation of advertising expense to the total selling price of a commodity. Though in rare instances expenditures for publicity of various sorts may have amounted to 10 per cent of the net sales price of certain specialty articles, it rarely happens that more than 5 per cent of the price received is paid out merely for advertising. It not infrequently happens, however, that from 10 or 15 per cent up to 40 per cent of the total selling expense is incurred for advertising. The various tables which have already been given in Chapter XX throw much light on this phase of the problem in retail establishments. In Table 63 is

TABLE 63

RELATIVE ADVERTISING EXPENSES IN TYPICAL MANUFACTURING CONCERNS[1]

(PERCENTAGE EXPENSE ON NET SALES)

Business	Advertising	Total Selling
	Per Cent	*Per Cent*
Trunk manufacturing	5	12.25
Hardware manufacturing	4.29	8
Dry-goods jobbing	1.6	7.33
Hosiery manufacturing	1.88	10
Food products manufacturing	4.55	14.3

presented the average experience of 1,489 typical manufacturing concerns.

The total annual expenditure for advertising in the United States is difficult to estimate, as many important concerns do not advertise. Hence averages would be misleading. Further, the actual amount spent in this fashion varies from year to year depending somewhat upon business conditions. A conservative aggregate figure would probably be from $1,000,000,000 to $1,200,000,000. Of this amount, probably $500,000,000 or more is spent for newspaper advertising, about half of this latter amount for direct mail campaigns, and perhaps as much more for all sorts of magazine and house organ advertising. In addition there is also a very large expenditure for novelties, signs, window and store displays, demonstrations, samples, theater programs, motion pictures, street car cards, billboards, and the like.

In order to secure actual financial results from advertising it is necessary for a business to plan most carefully. The type of distribution desired, as well as the nature of the products, should directly determine the method which shall be followed and the expenditure which may be justified. The purpose of the advertising campaign must be clearly outlined. The usual purpose, of course, is to increase net profits. Advertising is also used, however, for *protective* and *educational* purposes. In

[1] The data on which this table is based appeared in SYSTEM, May, 1921, page 673, ff.

such cases it is difficult to estimate the actual financial gains. The results may be purely psychological and intangible, though if the campaign is properly planned net profits should ultimately be increased thereby.

HOW MUCH SHALL BE SPENT FOR ADVERTISING?

In planning an advertising campaign a company should decide why it wishes to advertise, what results it hopes to achieve, to whom the appeal shall be made, what media shall be used, and how the publicity material shall be presented. Having decided these matters, it may be possible to determine in a broad way the financial results that may be achieved through increased sales, and consequently the amount of expense which it is safe to put into advertising. After some experience along these lines it is frequently possible to gauge with a good deal of accuracy how many sales can be expected from a given expenditure for publicity of this sort. Any concern which fails to keep a definite record of the results of its advertising is headed for the financial rocks.

While the method above suggested for estimating the proper advertising appropriation seems to be most logical, many other plans are followed. In fact, other plans are probably more common. (*1*) Sometimes a definite percentage of the past year's sales is appropriated for the following year's advertising campaign.[1] If the advertising is effective, this expenditure will show a constantly decreasing ratio to the present year's sales. (*2*) Some companies merely use all the money that can be con-

[1] Wholesalers have little need for expensive advertising. However, manufacturers who wish to establish their brand frequently find it necessary to incur heavy advertising expenses. Of a list of 35 manufacturing and public service companies, the median advertising expenditure a few years ago was stated by Dr. Starch to be 3 per cent of sales—the range being from 1 per cent to 10 per cent. For retailers, the following ratios as a percentage of net sales, based on Harvard Business School studies, are typical:

Meats	0.19%	Automobile Tires and Accessories	1.00%
Groceries	0.35%	Shoes	2.20%
Drugs	0.70%	Jewelry	3.10%
Hardware	0.85%	Department Stores (large)	3.20%

veniently spared at a given time. This method, however, is erratic, and frequently leads to a curtailment of expenditures for advertising at the very time when conditions are such that it might be most effective. (*3*) Another method is to appropriate from time to time an arbitrary lump sum which is more or less regarded as bread cast upon the waters without any very definite notion of what financial returns may reasonably be hoped for. (*4*) When expenditures are budgeted, a method of estimating the proper advertising appropriation will closely follow the method suggested in the preceding paragraph.

It is highly important that a concern know within reasonable limits the aggregate amount of money which must be expended in order to make the campaign successful. Unless the appropriations are sufficient, the entire expenditure may be wasted. There is always a strategic amount above which decreasing returns set in, and below which practically no results can be achieved. It is necessary to handle the campaign in such a way that the prospective buyer's attention will be attracted, his interest aroused, and a definite desire for the goods created. To be really successful, however, advertising must not stop at this point. The last step is to induce an actual purchase to be made. Sometimes, therefore, there must be a direct personal appeal through salesmen made to those who have been previously "prepared" as prospects by the advertising campaign. In such cases the salaries of salesmen are often a part of the expense of advertising, though this fact is commonly overlooked.

Many a concern deceives itself regarding the results of its advertising campaigns. The mere fact of business growth has frequently been interpreted as due to advertising, when as a matter of fact the cause was far different. Those who are thoroughly "sold" to the merits of this method of increasing sales frequently overlook its limitations and exaggerate its importance. In a period of rapidly rising prices, when orders come easy and salesmen degenerate into mere order takers, it is but human to conclude that increased sales are the result of a liberal advertising policy. The test, however, comes during a period of depression. It then frequently appears that ad-

vertising probably had very little to do with the increased volume of business. If in times when business is dull a company can increase its *net profits*—not merely its net sales—directly through advertising, while competitors who do not adopt this method suffer in comparison, then there is some proof of the efficacy of the policy followed.

It is sad to note the number of companies which in War years were pointed to as outstanding examples of what advertising could do for a business, and which in 1921-1922 were bankrupt. Either the advertising had nothing whatever to do with their increased volume of sales, or the volume was built on a most insecure foundation, under high pressure methods which did not bring lasting results. In many cases, also, it was the "below cost" selling price that increased the volume of sales, and not, as the company supposed, the publicity campaign. A number of companies have advertised themselves straight into the receiver's hands.

WHEN SHALL A COMPANY ADVERTISE?

Advertising has been recommended as particularly advantageous in periods of depression. To some extent the claim may be true. Certainly, particular lines of goods may be forced at such times, which otherwise might not be readily sold. On the other hand, the appeal of advertising copy is frequently thrown away in dull times when everyone tends to restrict his purchases. In practise, also, there is a tendency to curtail advertising expenses in these times because of the actual shortage of funds. The wisdom of the policy followed in this regard must be determined in accordance with specific conditions.

Some companies have found it desirable in more prosperous years to advertise liberally with a view to creating good-will for the future against less prosperous years. Thus they may be able slightly to reduce their income taxes through the increased expense at a time when profits are high. In this manner they may possibly gain in two ways at the same time.

In other cases it has been definitely found that the best time to advertise a *new* product is during a period of comparative depression. When business is booming and advertising of old lines is general, it is too difficult to attract the public attention. Old companies have frequently saved themselves from serious financial difficulties by introducing some new line of goods through advertising when the old line has failed to move in a sufficient volume.

Again, the problem of "seasonal" selling has in some instances been met by advertising with a view to securing advance orders or creating an actual demand for goods in the "out of season" months. That gains thus resulting from advertising may be very considerable can be seen when one recalls the losses which are incurred because of the seasonal conduct of business. Some of these financial losses are as follows: (*1*) Labor costs are raised because of the increased labor turnover and the frequent unemployment, resulting in a much lower labor efficiency. (*2*) The efficiency of salesmen is curtailed and there is an unavoidable increase in selling expenses. (*3*) Costs of material are probably increased because of the intermittent nature of the business and the rush demands which come at the peak of the period. Transportation difficulties also result. (*4*) More capital is required because of the greater investment in plant and equipment in order to meet the heavy demand for goods over a briefer period of time. A large portion of this capital is wholly idle for a part of the year. (*5*) Great price fluctuations inevitably result with the attendant risks and uncertainties.

It is obvious, therefore, that advertising which makes possible a diminution of the seasonal element in business may pay for itself many hundred fold. Here again, however, it is not safe to take too much for granted.

POSSIBLE WASTES OF ADVERTISING

Much of the money spent for advertising is probably wasted or even worse than wasted, even by first class concerns. Fraudulent concerns, as a rule, are heavy advertisers. Frequently

they have nothing whatever to offer their "customers" but their advertisements! [1]

The advertising wastes incurred by reputable concerns usually arise through bad judgment. The advertising media are not wisely chosen. The wrong type of advertising may be used in a perfectly suitable medium. The wrong sort of appeal may be made, or the appeal may be directed to a wrong quarter.

During the period of rapidly rising prices many a concern found that it had been most unwise to advertise the *price* of goods rather than the *quality* or the "brand." As costs rose it was obviously impossible to continue to sell the same article at the old price. Various alternatives might, of course, be followed by companies whose trade had been built up largely on "price" advertising:

(*a*) They might in certain instances be able to maintain the *quality* and reduce the quantity of the unit sold. (*b*) In other cases the *quantity* might be maintained while the *quality* would be reduced. Either of these policies, however, particularly the latter, might destroy the good-will which earlier advertising had built up. (*c*) Hence the apparently safest alternative, from the financial point of view, was simply to increase the price. When this was done, however, the customer's attention was inevitably and immediately called to the fundamental price consideration, and he might be most unwilling to buy the old article when its increase in price was so definitely called to his attention. It is generally unwise, therefore, in advertising to associate a definite price with a particular brand of goods.

Probably some of the heaviest wastes come through mail campaigns. From concrete observation it would appear that

[1] One of the causes for the enormous number of failures among low-grade "brokers" during post-war years has been commonly overlooked. They have expended almost unbelievably high amounts for publicity purposes. The writer recalls several instances of failed brokerage concerns from which he received, without any solicitation on his part, personal attention in the form of frequent telegrams, letters, books, elaborate analyses of corporations, daily and weekly market reports, telephone calls, and sore visitations, which must have cost the various firms hundreds of dollars. With such publicity methods, it is not strange that the expenditures after a while exceeded the income.

some very well-known organizations with supposedly intelligent managements have not the remotest idea of what a mailing list should be. Some lists seem not to have been revised since the time of Noah.[1]

Again, many wastes result because of the wholly unwarranted and extravagant claims made. The most effective advertising is careful not to exaggerate. Loss of business may result from making too sweeping claims. "An honest tale speeds best being plainly told."

One of the greatest wastes in advertising, no doubt, comes as a result of competitive selling, which, as business is now carried on, makes it necessary for one brand to be advertised just because a rival brand is in the field. In such cases, for certain staple products the business of one dealer can be increased only at the expense of another. If the advertising campaign of one producer is successful, that of the other may perhaps be unsuccessful. One man's gain may be the other's loss. To the extent that wasted motion results, the ultimate consumer, no doubt, pays the advertising bill. If, on the other hand, costs are lowered and more efficient methods are developed through this competitive advertising, the consumer will be, in the long run, the gainer. As long as competition in selling continues, it will be impossible to eliminate some wastes arising in this manner. It must be remembered, however, that the other expenses of competitive selling are usually many-fold as great as the advertising expenses.

[1] The writer has been periodically receiving for several years advertising matter from several nationally known business houses which is sent to him at the same address, but under several different variations of his name and position. Further, the literature always arrives in due course, even though for this long period of time no response has ever been made to the advertising. These instances, however, are not so extreme as a case which recently came to the author's attention in which a certain government mailing list had not been revised for a period of nearly 40 years. According to the latest information, publications were still being zealously sent to a former worthy citizen who departed this life some 30 years ago. His grandchildren now have the pleasure of consigning to the waste-basket these publications, which are distributed at the taxpayer's expense! Many business concerns are almost as careless in the matter of mailing lists.

ECONOMIC FUNCTIONS OF ADVERTISING

Beyond a doubt there may be important financial and economic gains arising through advertising. Some of these are the following:

1. Advertising may lead to lower cost of production or selling in certain lines of industry as a result of the increased quantity of goods sold. Through competition this lower cost will, no doubt, ultimately be passed on to the consumer.

2. Further, the proper sort of advertising may sometimes reduce selling costs by limiting the need for traveling salesmen, though some concerns have found the substitution of very questionable value.

3. A business may by advertising develop good-will for the future at a strategic time, even though immediate profits may be little if any greater.

4. By advertising, a market may be created for a wholly new product which is of such a nature as to increase the economic efficiency of the consumers to such an extent as to give them command over greater purchasing power. Thus the introduction of a new non-competitive product does not always decrease the sale of old established lines of goods.

5. The quality of goods may be standardized through the possibility of identifying the product publicly advertised and labeled by certain trade-marks. This may be a distinct gain from the customer's point of view.

6. Advertising may also distinctly raise the tone of a business concern. Having set its standards in this public manner, it is forced to conduct its business in the public eye. The picture which it paints in advertising tends thus to become a reality, and the business may be held to a high standard of performance.

WHO PAYS FOR ADVERTISING?

The question may now be asked, "Who pays for advertising?" Obviously, the seller of goods immediately foots the

bill. Of course, the seller can pay his bills only out of what he receives from the sale of his goods. In this sense, therefore, the customer must pay. However, these considerations deal only with immediate exchanges of money, not with basic economic principles.

In the long run the answer must depend upon whether or not advertising raises prices or lowers prices. Obviously, if advertising accomplishes the purpose intended, the turnover of goods will be increased in the distributor's hands and in factories. More goods will be produced, and their production will be more evenly distributed. Under such circumstances the cost of selling or producing goods per unit will probably be lowered In a competitive regime, therefore, the purchaser will ultimately reap at least a portion of the benefits. He then is the gainer from well-planned and effective advertising. The seller also gains.

On the other hand, when advertising does not accomplish its purpose, the seller has merely made an unwise expenditure He cannot force prices higher because of his bad judgment Competitors will ordinarily set the price which this ineffective advertiser must follow if he is to continue in business. His profits will, therefore, be reduced, and the consumer's price may not be in any way affected. Of course, if a company fails as a result of injudicious advertising, the ultimate consumer must in an indirect sense bear the burden, inasmuch as all misapplied energy decreases by so much the sum of utilities available for the public in general.

Finally, it must not be forgotten that the seller of goods himself is more concerned than anyone else could possibly be about the financial results of his advertising expenditures. He wishes to increase his profits thereby. If the desired result is not attained, he must either alter his methods, or cease to advertise, or be content with lower profits—though he can scarcely be expected knowingly to accept lower profits as the only alternative. However, there appears to be no good reason for thinking that the advertiser can put the burden of his loss in any direct way upon the ultimate consumer.

CHAPTER XXIII

BUSINESS FINANCE AND MERCANTILE CREDIT

Vast scope of mercantile transactions—Mercantile credit and bank credit contrasted—Sizing up the credit man—Sources of credit information—Most important sources, agency reports, property statements, interchange of ledger experience, information given by salesmen—Selecting the credit risk—How large a line of credit shall be granted?—Terms of sale—Unusual terms—Variations—Seasonal datings—Theory and practise of the cash discount—Cooperation with the customer—The abuse of mercantile credit—Making collections—Credit insurance, purposes, methods and results—The National Association of Credit Men—Accomplishments—"Canons of Commercial Ethics."

IN the year 1927, the total value of products made by all manufacturing concerns in the United States was $62,714,000,000. In order to turn out this quantity of finished or semi-finished goods, materials to the extent of $35,128,000,000 were used, most of which were, of course, purchased from other concerns. The gross value of farm products sold in the same year was about $13,000,000,000. A very large proportion of these products did not pass through the hands of any manufacturer on their way to the ultimate consumer. In fact, the actual cost of raw materials purchased by all concerns manufacturing food and kindred products was only $8,113,000,000. The value of the product of mines in 1927 was around $5,500,000,000.

A large proportion of manufactured goods are sold directly to consumers by the producers. The federal tax returns, however, indicate that the gross income of all trading companies (112,705) during 1926 was $41,000,000,000. No doubt the total volume of sales of the many hundred thousand unincorporated trading concerns even exceeded this figure. Finally, the total gross income of all corporations in the United States (455,320) is reported as $142,000,000,000 in 1926, of which $106,000,000,000 covered the sale of physical things.

It is obvious from the foregoing figures that the total annual

volume of domestic trade in the United States, including at least $40,000,000,000 sales of middlemen, is not far from $150,000,000,000, of which more than $100,000,000,000 comes under the supervision of the credit department. Of this amount a large proportion involves the direct use of *mercantile credit*. Even though goods are properly priced in order to net the seller a profit, no net return is actually realized until the goods are sold under satisfactory terms and the bills are collected. Obviously, therefore, the credit department of a business is a most vital link in the entire industrial organization. In spite of the good work which has been done in purchasing, producing, and selling goods, the improper use of mercantile credit may very speedily wreck any enterprise.

MERCANTILE CREDIT AND BANK CREDIT CONTRASTED

Mercantile credit may be generally thought of as merely an extension of the time for payment, given by the seller of goods to his customer. While certain underlying principles are the same, it differs in a number of very important respects from bank credit which has been discussed in other connections. The use of mercantile credit by a business is an every-day occurrence both for large and small concerns. It is normally extended for relatively small amounts. Commercial bank credit, however, is used only periodically by the borrower—perhaps only once each year. Investment credit, on the other hand, is used only at rare intervals, but for a long period of time, and in the case of many concerns it is never used. Some of the more specific differences between the two main types of credit are the following:

1. The bank lends money either on promissory note or on the security of satisfactory collateral. No collateral, however, is required in the case of the usual commercial loan. The seller who extends mercantile credit merely allows the buyer to have possession of the goods for a certain period of time before payment falls due.

2. Bank credit is ordinarily given in order to enable the customer to "discount" his merchandise bills, and thus make unnecessary the use of long time mercantile credit.

3. Bank credit, again, is customarily extended in order to enable the borrower to secure funds for general "working capital" purposes, without any necessary reference to a specific single transaction. Mercantile credit, on the contrary, is extended only in connection with the purchase of a definite bill of goods.

4. The bank discount rate charged on loans is usually very much lower than the "cash discount" which the buyer forfeits provided he does not pay cash for the goods which he purchases.

5. In granting bank credit, the banker normally takes far greater precautions than are considered necessary by the merchant or manufacturer in selling a bill of goods to his customer.

6. There is naturally a much more intimate relation existing between the borrower and his bank than is customarily found to exist between the selling house and its customers. The number of merchandise accounts is far greater and their average size is much smaller than in the case of bank credit.

7. Finally, there is far more competition in the extension of mercantile credit than in the granting of bank credit. The number of organized sellers of goods is many-fold as great as the number of commercial banks, and as credit must be extended frequently in small amounts it is obvious that more risk can properly be taken. Bank credit largely involves the use of the money and credit of others than the bank itself, whereas in granting a mercantile credit the risk falls primarily on the owners' capital.

SIZING UP THE CREDIT MAN

Not until a comparatively recent date has the true function of the credit department been thoroughly understood. There has been a tendency to regard the credit man as a sort of "glorified" bookkeeper, whose principal business is to keep gloomy records of the financial affairs of the firm's customers, and to throw frequent dashes of cold water on the optimistic sales department. As a matter of fact, however, because of his unusually strategic position, the credit man of the company

needs to be one of the best all-round business men in the organization.

Some of the qualifications which he must most frequently bring to bear on his work are: accurate *knowledge* of the company's business, the customer's business, and general business conditions; keen *judgment* of men and affairs; constructive *imagination; courage* to act upon his convictions gained through the exercise of the foregoing qualities; and finally, *energy* in action and *promptness* in making decisions.

These may be thought of as the more common qualifications of the average successful business man. The credit man, however, must, provided he serves his company well, combine with the foregoing an unusual capacity to get "the other fellow's" point of view, and to sympathize with his peculiar difficulties. The credit man must be cautious, yet optimistic; he must be conservative, yet willing to take a chance; he must be eternally vigilant, yet always acting on the assumption that men in general are honest. Again, the credit man must be possessed of an unusual capacity to cooperate with others in the organization, particularly with the sales department. He must be ready to effect reconciliations and make adjustments with customers, with an aim at all times to "sell" the organization and its policies to those who buy from his concern. Invariably he should be tactful and patient to an unusual degree.

It would be difficult to lay down specific rules for testing the financial effectiveness of the credit man's work. It should be noted, however, that merely to have a small percentage of bad debt losses to annual net sales is by no means a test of the credit man's worth to the organization. It is possible for a company to have too few bad debt losses in the sense that much profit may be lost by picking the trade *too cautiously*. It is important to know how many orders are refused as well as how many are accepted. It is easy to refuse orders; much harder to select reasonable risks or to handle the doubtful customer in such a manner that he will be a future booster for the company. Different cases must be treated in different ways. Some of the tests which may be applied to the work of the credit man are such as the following:

How long are customers retained? How many new customers are gained through the helpful attitude of the credit department? How many old customers have been lost? How many would-be customers have been turned down? How rapidly are the receivables turning over? How promptly are the payables being met (provided the function of the credit man extends thus far in a particular case)? What is the proportion of bad debt losses? How much, relatively, is expended in the work of collection, for legal proceedings, and the like? How much assistance has the credit department rendered to customers in a manner which will increase the good-will and future business of the company?

If a credit man can measure up well when such tests are applied, he is a most valuable part of the organization. At any rate, *the aim of the credit man should be to increase the net profits of the business by aiding in the selling of all the goods he can with the least possible loss from bad debts, with the lowest possible expense, and with the smallest possible percentage of orders declined or customers lost.*

SOURCES OF CREDIT INFORMATION

Since the average bill of goods sold is relatively small, it is obvious that it would be neither possible nor desirable in extending mercantile credit always to make the detailed and extensive investigations which should properly be carried on by the banker. Much will depend upon the nature of the business, the margin of profits made on the goods sold, the size of orders, and the character of the concern's customers. However, more and more attention is probably being given to the securing of real and dependable information regarding those buyers to whom mercantile credit is extended. In general the chief sources of information open to the credit man are the following:

1. The reports of the large mercantile agencies.
2. The financial or "property" statement of the buyer.
3. Ledger experience secured from others who have dealt with the customer, including trade "opinions."

4. The reports of the company's salesmen.

5. Information received through banks.

6. Information gained through personal interviews conducted by the credit man or by the company's special credit investigators.

7. Reports of local attorneys.

8. Reports secured through trade associations, local credit exchange bureaus, and particularly from the Credit Clearing House, which in recent years has been "checking" nearly a million retail buyers.

After the rather extended discussion of sources of information in connection with the granting of bank credit, it is necessary in this place merely to mention three or four of the commoner methods of securing information which the credit man has found particularly useful.

Mercantile agency "ratings" are extensively used by the credit man in deciding whether or not to pass upon a first small order. Some sellers unfortunately investigate the case no further. The agency ratings, however, should be regarded merely as a useful beginning. As is well known, much inaccuracy is bound to creep in when an attempt is made by the agency to list the credit of every business organization in the United States irrespective of size. Obviously, it would be quite impossible to give up-to-date and dependable information on nearly two million different concerns. Further, the wholesale methods of securing information which are used by the great mercantile agencies (Dun's and Bradstreet's) preclude the possibility of absolute accuracy. Frequently not sufficient information is received to enable an intelligent rating to be made. Sometimes a good deal of injustice may thus result for the business house which is "rated," and at other times the selling concern using the ratings may be deceived because of an unfavorable estimate placed upon the buyer in a credit rating which has become antiquated. Needless to state, upon request special reports can be secured from the agencies by those concerns which subscribe to its service. In many instances, however, not even these reports are thoroughly up-to-date. The

form of request used by a subscriber in asking special information of this sort through the mercantile agency is included herewith.

Ledger No. 5

SUBSCRIBER'S TICKET

R. G. DUN & CO.

THE MERCANTILE AGENCY

Give us, in confidence, full information on the following concern. We agree that the information shall be used by us alone, in our business only, to gauge the extension of credit.

We state below, our information on the concern, and we agree to substantiate the facts, if need be, at your request.

If you have already sent us your last "general" report on this concern, send us now—free of charge—ledger information only.

Name ....
Business ....
Street & No. ....
Town ....
State .... County ....
.... Subscriber
No. ....

Boston Office

....

Highest Credit within 18 mos. $........................
Now Owe $..
Past Due $............... Due Date ....
Unfilled Orders $....................................
When to be shipped...................................
First Sale .... 191.. Last Sale .... 191..
Total Number of Sales................................
Terms ....

Payments

[ ] Anticipate [ ] Discount [ ] Prompt
Slow.....................days
[ ] Pay by Note [ ] Collected by Agency
[ ] Notes paid when due [ ] Collected by Attorney

Trade Abuses

[ ] Return goods unjustly [ ] Take discounts unfairly
[ ] Countermand orders [ ] Make unjust claims

....

FORM 19. Subscriber's Ticket of R. G. Dun and Company

The usual general mercantile rating covers two points, first, the estimated pecuniary strength of the business, and secondly the general credit standing. An estimate of the capital may be based on actual financial statements received through the agency's representative, or may be arrived at through questions and estimates. As a rule the "net worth" of the business is listed under this head, the aim being to state the unencumbered capital invested in the business. The actual *credit* rating of the company is based on the judgment of the agency's representative, largely as a result of information secured from those with whom the company has credit dealings. Those who pay with promptness and take their cash discounts are given a high or "first grade" rating. This rating gradually shades down to those who merely pay with reasonable promptness, though not taking their cash discounts, to those who are slow pay, and finally, to those who pay only infrequently or not at all. The system of ratings used by the two national agencies and published in their "rating books" is given in Table 64.

Much more dependable information can frequently be secured through a recent financial statement of the purchaser of goods. Through the untiring efforts of the National Association of Credit Men the practise has gradually developed of endeavoring to enlist the cooperation of all considerable purchasers so that they will keep their accounts in such a manner that it will be possible for them to file such "property" statements. Though it is by no means always possible to get a completely filled-out statement, there is no reason why any properly conducted business, small though it be, should not be willing and able to give most of the information requested, if it wishes the seller to send goods on credit.

In view of the detailed attention given to the financial statement in an earlier chapter, it is scarcely necessary to review the matter further in this connection. It should be stated, however, that the grantor of mercantile credit is particularly interested in the liquidity of the current assets, the volume of business, the operating expenses, the turnover of stock and receivables, and the question of fire insurance and personal insurance in behalf of the company. It is further highly impor-

TABLE 64

COMMERCIAL CREDIT RATINGS

A. R. G. DUN & CO.

Estimated Pecuniary Strength		General Credit			
		High	Good	Fair	Limited
AA......	Over $1,000,000..........	A1	1	1½	2
A +....	$750,000 to $1,000,000....	A1	1	1½	2
A.......	500,000 to 750,000....	A1	1	1½	2
B +....	300,000 to 500,000....	1	1½	2	2½
B.......	200,000 to 300,000....	1	1½	2	2½
C +.....	125,000 to 200,000....	1	1½	2	2½
C.......	75,000 to 125,000....	1½	2	2½	3
D +....	50,000 to 75,000....	1½	2	2½	3
D.......	35,000 to 50,000....	1½	2	2½	3
E.......	20,000 to 35,000....	2	2½	3	3½
F.......	10,000 to 20,000....	2½	3	3½	4
G.......	5,000 to 10,000....	....	3	3½	4
H.......	3,000 to 5,000....	....	3	3½	4
J.......	2,000 to 3,000....	....	3	3½	4
K.......	1,000 to 2,000....	....	3	3½	4
L.......	500 to 1,000....	....	....	3½	4
M.......	Less than 500....	....	....	....	....

B. BRADSTREET

Estimated Wealth		Grades of Credit		
G.......	$1,000,000 and above............	AA	A	B
H.......	$500,000 to $1,000,000...........			
J.......	400,000 to 500,000...........	A	B	C
K.......	300,000 to 400,000...........			
L.......	250,000 to 300,000...........			
M.......	200,000 to 250,000...........			
N.......	150,000 to 200,000...........			
O.......	100,000 to 150,000...........	B	C	D
P.......	75,000 to 100,000...........			
Q.......	50,000 to 75,000...........			
R.......	35,000 to 50,000...........			
S.......	20,000 to 35,000...........	C	D	E
T.......	10,000 to 20,000...........			
U.......	5,000 to 10,000...........			
V.......	3,000 to 5,000...........	D	E	F
W......	2,000 to 3,000...........			
X.......	1,000 to 2,000...........			
Y.......	500 to 1,000...........	E	F	
Z.......	0 to 500...........			

tant to know whether the concern does business with many sellers or with only a few, and whether its net worth has been increasing in proportion to the volume of business done. Other considerations which assist the credit man in determining the line of credit will be referred to in a moment.

Much invaluable information is secured through the interchange of ledger experience with other sellers who have had dealings with the customer. *Credit interchange* bureaus have been developed under the auspices of the National Association of Credit Men as well as among dealers in various localities. Similar information is also supplied through the Credit Clearing House. While this interchange of information is sometimes abused and used by competitors with a view to furthering their own interests, the idea underlying the exchange of information is a perfectly sound one. Properly used and confidentially held, the interchange of credit experience is one of the most powerful agencies known for raising the standard of business ethics. The accompanying form has been approved by the National Association of Credit Men in securing information of this sort. The one who makes the inquiry should always enclose a record of his own experience or knowledge of the concern whose credit is being investigated, so that reciprocal service will be rendered. With every form is sent out a duplicate with this record of experience, which is to be retained for the files of the party to whom the inquiry is sent.

Because of its vital significance to all students of business finance, there is quoted in this connection the statement of the obligations of the maker and receiver of an inquiry in the interchange of credit information as approved by the National Association of Credit Men. This statement appears on the reverse side of the inquiry forms which the association recommends.

Finally, a vast amount of vital and intimate information can ordinarily be secured from the salesman of the concern which is considering the extension of credit, provided traveling or local salesmen are employed. The salesman is in a position, if properly instructed, to collect an immense amount of local in-

"Large assets are not always necessary to the creation of credit; what is most desirable is, that credit be in relative proportion to the actual assets."

PROPERTY STATEMENT
TO

"The giver of credit is a contributor of capital, and becomes, in a certain sense, a partner of the debtor, and, as such, has a natural right to complete information of the debtor's condition at all times."

Form Adopted and Recommended by the National Association of Credit Men

For the purpose of obtaining merchandise from you on credit, we (I) make the following statement in writing, intending that you should rely thereon respecting our (my) financial condition as of (Date)________ 19____
(All questions should be answered. When no figures are inserted, write word "None.")

ASSETS			LIABILITIES		
Cash in hand________			For MERCHANDISE:		
Cash in bank________			Accounts owing not due________		
Accounts owing by customers, good and collectible, not pledged or sold________			Accounts owing past due________		
Notes owing by customers, good and collectible, not pledged or sold________			Trade Acceptances payable________		
Trade Acceptances receivable, not pledged or sold________			Notes payable for Mdse.________		
Merchandise: (not on consignment or conditional sale.) (How valued; Cost____ Market____)________			For BORROWED MONEY Notes payable to banks________		
Other quick assets: (Describe)________			Notes or debts payable to others (including relatives and friends)________		
________			Deposits of money with us. (Describe)		
________			________		
			Owing for Wages and Salaries________		
			Owing for Taxes (city, state and federal)____		
			Owing for Rental________		
TOTAL QUICK ASSETS			Owing for Insurance Premiums________		
________			TOTAL QUICK LIABILITIES		
Machinery: (How valued; Cost____ Depreciated____)____			Debt secured by mortgage on land or buildings________		
Fixtures and other Equipment (How valued; Cost____ Depreciated____)			Debt secured by chattel mortgage or other liens________		
Land and Buildings as described below____			Debt secured by judgment________		
________			Other liabilities: (Describe)________		
Notes and Accounts owing from officers, employees, or others not customers____			________		
Other assets. (Describe)________			________		
________			TOTAL LIABILITIES		
________			NET WORTH________		
TOTAL ASSETS			TOTAL		

What books of account do you keep?________

Was this statement made from those books?________ Do you keep cost records?________

Do you sell or pledge your accounts to creditors, banks, finance companies or others?________. If so, what amount is so sold or pledged? $________ What amount of your accounts have you sold or pledged during the past twelve months? $________

Are any creditors secured by mortgage or lien of any sort?________ If so, how?________

Are any claims in attorneys' hands or suits against you?________

Have you merchandise on consignment or conditional sale?________ If so, what amount? $________

If business property is leased, for what term and what rental?________

Name and locality of your bank or banks________

Location and kind of business________

Previous business experience________ Where________

It is important that every question on both sides of this sheet be correctly answered and that the blanks be carefully filled in. In answering questions involving amounts write the word "none" where figures do not apply. You will find it advantageous to keep a copy of this statement for comparison with the showing you will be able to make a year hence.

FORM 20. Property Statement Recommended by the National Association of Credit Men

INSURANCE

On Merchandise $________ On Buildings $________ Machinery $________ Fixtures $________

Other Equipment $________ Employers' liability $________

Is any insurance assigned?________ What amount?________ To whom?________

Amount of life insurance for benefit of business $________

With what companies________

SUMMARY OF PROFIT AND LOSS

Inventory of Mdse. beginning of fiscal year (not including fixtures or equipment)________			Sales last fiscal year ________		
			Income from all other sources________		
			Inventory of Mdse at close of year________		
Cost of Mdse. purchased during the year			Total Income for year________		
General expenses including salaries, losses, etc.________			Less Total Expenses ________		
TOTAL EXPENSES			NET PROFIT FOR YEAR________		

RECORD OF LAND AND BUILDINGS

Title in name of	Description and location	Book value	Assessed value	Amount of Encumbrances	To whom

BUY PRINCIPALLY FROM THE FOLLOWING CONCERNS

Names	Addresses	Amount Owing			
		Open Account		Notes	

Names and Addresses of Owners of Business________

REMARKS:

The foregoing statement has been carefully read (both printed and written matter) and is in all respects complete, accurate and truthful. It discloses to you the true state of our (my) financial condition on the date above stated. Since that time there has been no material unfavorable change in our (my) financial condition; and if any such change takes place we (I) will give you notice. Until such notice is given, you are to regard this as a continuing statement.

Firm Name________

Signed by________

Street________ Town________ State________

Date of signing statement ________ 19____

Form R.

FORM 20. Property Statement Recommended by the National Association of Credit Men (*Reverse*)

Kindly give us below **YOUR EXPERIENCE** with

Name__________ Business__________

P. O.__________

From whom we have__________ order for $__________

(Indicate whether first order)

ALL INFORMATION WILL BE CONSIDERED STRICTLY CONFIDENTIAL

Yours truly,

APPROVED AND ADOPTED BY NATIONAL ASSOCIATION OF CREDIT MEN

To__________

____

NATIONAL ASSOCIATION OF CREDIT MEN ORGANIZED 1896 VIGILANTIA

		MANNER OF PAYMENT ANSWER—YES OR NO
Sold from_____ To_____		
Terms _____		Discounts
Highest recent credit, $		Prompt and satisfactory
Total amount now owing, $		Slow but considered good
Amount past due, $		Slow and unsatisfactory
Other information_____		Days slow
		Account secured
		Notes secured
		Notes paid at maturity
		Makes unjust claims
		Collected by attorney

RETURN THIS TO US.

FORM 21. Credit Interchange Form Adopted by the National Association of Credit Men

formation through conversation, observation, questioning, and even gossip which may prove invaluable to the credit man in sizing up a particular situation. In fact, even without a property statement or any other specific information, the intelligent salesman can frequently furnish all the data needed by the credit department in passing upon an order. Obviously, however, with a view to securing this cooperation, the salesman must be thoroughly trained in the broader aspects of his company's selling policy so that his interest will not center merely

THE OBLIGATIONS OF THE MAKER AND RECEIVER OF AN INQUIRY IN THE INTERCHANGE OF CREDIT INFORMATION

When one credit department asks another to detail its experience with a certain buyer, we have a delicate situation around which must be thrown well understood safeguards.

The inquiring department should observe the following general rules:

1. It must know that the making of the inquiry is necessary, for indiscriminate making of credit inquiries hurts the credit interchange system because it develops unnecessary labor. The inquirer, therefore, must be reasonably certain that the party inquired of has something to contribute which shall bear upon the risk in question.

2. **The inquiry must be made on an order in hand or a ledger account.** The making of inquiries on prospective customers when the inquirer explains or omits to explain that he has no order or experience but is merely endeavoring to size up the desirability of a buyer, leads to restless complaint against the interchange system.

3. **The inquirer must accompany his inquiry with an accurate explanation of the reason for making it and also give his experience with the account.** If the inquiry is made on a first order, he must so state with the amount of the order. The making of inquiries without the disclosure of the inquirer's exact experience has created in the minds of some credit men a disinclination to interchange with credit departments.

On the other hand the credit department inquired of should observe generally the following:

1. Give its exact experience, to fall short of which is to hurt the interchange system and direct a blow at a tremendously important institution in modern day business.

2. Place the duty of answering inquiries in responsible hands and not leave it to unqualified assistants who are indifferent to the importance of the system.

3. Inform the inquirer whenever he has failed to carry out his part under the interchange system, this being necessary to correct the faults and abuses which some through carelessness, others through blind obstinacy, have imposed upon interchange. Merely to ignore faults and abuses gets us nowhere.

The officers and directors of the National Association of Credit Men urge the importance of the observance of these general lines of action on the part of the receiver and giver of credit information to the end that the system may do its best work and contribute to that safe clearance of risks which every credit department should, for the good of itself and all, work consistently to support.

FORM 21. Credit Interchange Form Adopted by the National Association of Credit Men *(Reverse)*

in the selling of goods. He must be trained to realize that it is far better not to make a sale than to sell a bill of goods for which payment will never be received. The salesman must also learn that no policy is more detrimental to the house which he represents than to offer special concessions not consistent with the terms adopted by the selling house. Further, it is absolutely essential that the salesman cooperate at every point in supporting the credit policy laid down by his company. In a moment some further attention will be given to the constructive work which may be carried on by the salesman who *sells* his *company* to the buyer, and not merely a bill of goods.

SELECTING THE CREDIT RISK

Obviously a great deal of judgment as well as tact must at all times be used by the credit man in deciding whether or not a bill of goods shall be sold on credit to a new customer. Even more tact is required in refusing to extend additional credit to an old customer. Some of the vital considerations which will enable the credit man to separate the safe risks from the unsafe risks are already familiar to the reader in the light of previous discussions.

It is highly essential, however, to know not merely the reported financial standing of the buyer, but also the way in which he conducts his business. Does he sell for cash, or on a credit basis? To what type of customers does he make his sales, if on a credit basis? Does he buy "light" and frequently, or does he tend to overstock? What is the amount of his indebtedness, and when is it coming due? How long has he been engaged in the business? Has he chosen a suitable location? What are his outside interests? With how much capital did he start, and how much money has he been making? What is his character, his nationality, his personal habits, and the like? What are his family relations, and his religious affiliations? What is the relation of this particular business to general business conditions, and to the conditions peculiar to the section of the country in which the prospective buyer is located?

All such considerations are vital, in addition to a mere financial analysis, in enabling the credit man to know whether a risk can properly be taken. At all times, however, it must be remembered that a company's general policy should definitely affect the credit man's decision. There are occasions when a manufacturing concern, wishing to extend the market for its goods, will assume many risks which would not ordinarily be taken by a wholesaler or jobber whose margin of profit is usually narrow, and who has no particular interest at stake in wishing to extend the trade in a specific product or brand of goods. Some risks may, therefore, properly be taken as a part of the normal expenses of "advertising" and new business getting.

The credit man should remember that there is probably some weak link in every chain. Very few 100 per cent perfect risks will be found. He must, therefore, be cautious in securing and evaluating his information so that no offense will be given. An unusually high standard of ethics must be maintained in connection with all investigations, and as nearly as possible, after certain minimum and universal requirements are met, each case should be decided on its particular merits. Even though it may be necessary to refuse or to "scale down" the order, the would-be customer should be handled in such a courteous fashion that he will, under suitable conditions, be a good prospect for future trade relations. Frequently, if the *character* of the purchaser is satisfactory, it may be possible for the credit man by means of a little constructive advice to show him how the company's requirements can in the future be satisfactorily met, even though under present conditions the credit rating may be unsatisfactory. Sometimes, also, it is possible by tact to put orders on a cash basis until such time as credit can be safely extended.

HOW LARGE A LINE OF CREDIT SHALL BE GRANTED?

To some it may be surprising to find how very indefinite are the rules ordinarily followed in setting a limit to the extent of mercantile credit which shall be granted to a given purchaser. Naturally, all of the considerations above mentioned will assist the credit men in passing upon the desirable size of order. The amount of credit which he is willing to allow at a given time or within a certain period will, of course, be in a measure the resultant of his analysis of such data as the following:

(*1*) The nature of the business, (*2*) its age, (*3*) the net worth, (*4*) its terms of sale, (*5*) the activity and liquidity of its current assets, (*6*) the annual volume of business, (*7*) the appropriate size of order for a business of this volume, (*8*) the number of other houses from which purchases are made, (*9*) the margin of profit made on goods sold, (*10*) the expenses of operation, (*11*) the future prospects of the business, (*12*) the *character*, and (*13*) *capacity*, age and habits of the management.

As conditions are constantly changing, it would be rather unwise for any seller to establish too definite limits as to the line of credit which will ordinarily be extended to a customer. His *capacity to make money,* and his *promptness in paying his bills,* will probably be the most significant factors in deciding the matter. Obviously the customer who can promptly sell the goods which are shipped to him, and can promptly make payment therefor, is a very safe risk. The problem of mercantile credit is here somewhat different from that of bank credit, inasmuch as under certain conditions each transaction may be immediately self-liquidating, whereas the banker's loan must be liquidated ordinarily out of a composite or series of individual transactions. Many credit men, therefore, reason that it is unnecessary to worry about the size of individual order sold to a customer who promptly pays his bills, since he would be unable to do so unless his goods were being rapidly sold. In accordance with this line of reasoning no order is too large which the customer finds it possible to sell within a reasonable period of time.

In passing upon a new order, however, the credit man can scarcely find it possible to arrive at so easy a solution of the problem, nor would he be fully warranted in acting solely upon the experience of other creditors in this matter. Some dealers, therefore, limit the maximum line of credit to a certain percentage of the customer's working capital; 10 or 15 per cent is a not infrequent limit, though occasionally the safe limit is even put as high as 20 or 25 per cent of the net worth in certain very stable lines of business. The higher the normal risks of the business, the lower should be the maximum credit extended by the seller. When the margin of profit on goods sold is very high, there is also a tendency to be more liberal regarding the line of credit, since the increased volume of sales may more than counterbalance additional losses which result from a more generous credit policy.

The writer would suggest that in many instances much good might result from more careful analysis of this problem by mercantile houses or manufacturing concerns. It should be possible through a careful study to determine what, in gen-

eral, is the proper proportion of goods of a certain type to be carried by the buyer. In other words, it should not be difficult to find out what proportion of his total inventory *should* be represented by different classes of goods, in order to make his business properly balanced. Taking this percentage as a starting point, the annual volume of the buyer's business should be considered, and the normal annual turnover of the different classes of goods dealt in. It then becomes a simple matter to know approximately how much money the purchasing house should at a particular time have invested in a certain type of goods. If all of these goods are procured from one selling house, the decision as to the proper line of credit is almost self-evident. If, on the other hand, purchases are made from different sources, such information, together with the amount of credit extended by these other dealers, should at all times be requested by the seller. Proper deductions can then readily be made in order to arrive at the "safe limit" of credit to be extended by the particular selling house in connection with the purchase of a given article. While rigid adherence to the policy outlined would be neither possible nor desirable in all cases, inasmuch as the local and personal elements will at times vitally affect the situation, yet it would seem that by following these suggestions mercantile credit might be put upon a much more scientific basis than is now generally the case.

As an example of how this question may be concretely studied, the following tabulation is given, based on the experience of Childs' Restaurants. The figures show the various proportions of each $100 spent in the average restaurant for the different foods, broadly classified. On the basis of such figures it is, of course, easy to determine the actual quantities of the different articles which must be purchased in order to keep the demand satisfied. The normal "turnover" of these different commodities is also known by the proprietors, and the figures should be given to those who sell any commodities on credit. Thus, it is a fairly simple matter, when the actual volume of sales is known, to determine how much of each commodity can with safety be bought, and hence the reasonable *maximum* line of credit. The figures are as follows:

TABLE 65

DISTRIBUTION OF $100 SPENT IN A CHAIN RESTAURANT

Beverages	$20.00
Griddle products	16.50
Hot dishes, ready to serve	13.00
Desserts	12.00
Egg dishes	9.50
Special dishes	5.70
Bread	5.40
Sandwiches	4.25
Oysters	3.50
Soups	2.75
Cereals	2.65
Hot dishes to order	2.35
Vegetables	1.50
Salads, cold dishes, miscellaneous	.90

The average check amounts to about $0.47.

TERMS OF SALE

Few questions are more puzzling to those not generally familiar with the situation than the varying terms of sale which are met with in different lines of business. The terms frequently vary even within the industry itself, depending upon custom and convenience. Further, even a particular company may extend different terms to different customers in accordance with their credit rating and the company's knowledge of their business affairs. Sometimes, also, new customers receive different terms from those which are granted to old customers in a particular business, because of the desire to increase the volume of sales, however unwarranted the practise may be. Again, different terms are sometimes extended in connection with a new product that is being pushed than for already developed lines of goods which are being carried by the same seller. Finally, there are frequently many additional adjustments made by the seller, depending upon the peculiar needs

and interests of a particular purchaser. There thus results a good deal of bewilderment as to what credit policy is actually being followed in specific cases. However, certain "terms" ordinarily apply in theory and usually in practise to particular industries, though generalization is dangerous.

In some cases goods are sold only on the understanding that cash must be paid on delivery (C.O.D.). When this method is followed a draft is usually drawn on the purchaser, to which bills of lading and perhaps other documents are attached, so that goods will not be delivered to him until payment is made. Sometimes, when a customer's credit is very questionable, cash is demanded even before delivery of the goods. Again, it frequently happens in certain lines of trade that a customer may be allowed as much as 30 days from time of shipment to pay his bill, no cash discount being allowed for prompt payment. This is not an uncommon practise in the iron and steel business, particularly in the sale of pig iron or standard steel rails.

Most commonly, however, goods are sold on *terms* allowing a cash discount for prompt payment, usually within 10 days from the date of the invoice, with the stipulation that the full face of the bill must be paid at the end of 30 or 60 days from time of shipment unless the cash discount is taken. The usual expression for these terms is, as an example, "2 per cent, 10 days, net 30 days" (or 60 days as the case may be). In practise the amount of the cash discount allowed varies from as low as one-half of one per cent for cash payment within the designated period, to as much as 5 or even 10 per cent. The most common cash discount is probably 2 per cent.

Frequently the credit terms are different, according to whether sales are made to wholesalers or to retailers or perhaps even to the ultimate consumer. Much will also depend upon the competitive situation. In a sellers' market, when accounts come easy, there is a tendency to tighten up on the terms of sale. In a buyer's market, however, more liberal policies will be followed, and credit will be more readily extended.[1]

[1] Terms of sale are constantly changing depending upon general business conditions. As above indicated, they are commonly more liberal in periods of

(Footnote continued on next page.)

It is scarcely necessary to indicate other variations in the terms of sale ordinarily granted. The practise is fairly common to date bills ahead in certain lines of business. This means that the terms of discount will begin to operate at a definite future date after goods have been shipped. For example, if the terms

depression than in periods of great prosperity. Further, it is not always possible to suggest definite standards even for a particular industry. The approximate terms of sale in some of the leading industries in 1920 were as follows:

Meat packing.—Fresh meats are usually sold on a weekly basis; cured meats are sold to a considerable extent on 30-day terms; while sight drafts are almost always drawn against carload shipments with bill of lading attached.

Confectionery.—The manufacturer sells both to wholesalers and retailers. The terms of sale to the wholesaler are generally 2 per cent, 10 days, net 30 days. The wholesaler, in turn, frequently makes longer terms to the retailer, though usually he sells for 1 per cent, 10 days, net 30 days.

Wholesale groceries.—In recent years an attempt has been made to shorten terms and reduce discounts, the aim being 1 per cent 10 days, net 30 days.

Iron and steel.—Pig iron is usually sold upon terms of net 30 days from date of invoice or average date of monthly shipments. Terms differ for finished products though commonly not more than one-half per cent or 1 per cent is allowed for payment within 10 days. The net terms do not ordinarily exceed 30 days. Generally, however, the cash discount is greater for the more highly finished products which are ordinarily sold in smaller lots and to a less dependable class of purchasers.

Hardware.—Terms differ widely, the commonest being 2 per cent, 10 days, net 60 days to the jobber.

Automobiles.—The manufacturer usually receives cash payment using a sight draft with bill of lading attached. The dealer very frequently sells on time, requiring a certain initial payment, perhaps 20 per cent or more of the purchase price. He then commonly takes a chattel mortgage on the car sold or has a conditional sales agreement signed and also receives the promissory note of the purchaser if cars are sold at retail. (See Chapter XVIII for a further discussion of terms and methods of sale in the automobile industry.) Some automobile companies through subsidiary finance corporations finance the sale of their product straight to the ultimate consumer. An interesting example of this practise is furnished by the General Motors Acceptance Corporation which requires an initial deposit of at least one-third of the selling price of the car and which also makes a very thorough investigation of the customer's personal credit before the sale is made.

Rubber tires and tubes are sold heavily through branch houses of the manufacturers themselves. Sales are thus made direct to the retailer or dealer and only a small proportion to jobbers and to automobile manufacturers. The regular manufacturer's terms on tires are 5 per cent, 10th *proximo* (that is, 5 per cent discount for payment by the tenth of the month following the date of shipment). Frequently no net terms are specified. Apparently however, 75 per cent or more of the accounts are paid by the 10th *proximo*. Recently there has developed a practise of "dating" for tires shipped during the winter months, the commonest date being April 1st. This means that the customer who purchases in the off season can pay his bill on the 10th of May and still receive the cash discount even though tires have been shipped some months earlier.

Electrical products.—Terms vary in this business. Net terms granted by

should be "5 per cent, 10 days, with 60 days dating" (sometimes written 5/10-60, or 60 extra), it would mean that the customer could secure 5 per cent discount from the face of the bill at a period of 70 days following the date of the in-

manufacturers may be either 30 days or 90 days and the discount ranges from nothing to 5 per cent. The terms offered to jobbers are customarily 2 per cent, 10 days, net 60 days, while consumers may be given terms of 2 per cent, 10 days, net 30 days.

Coal.—Anthracite is usually sold by the miners on net terms of 30 days. Bituminous coal is probably most frequently sold at net 15th *proximo*.

Cotton.—About 50 per cent of the total output of finished cotton goods is sold to jobbers. The rest is distributed by the makers of apparel and retailers. The commonest terms on finished, converted, or bleached goods are 2 per cent, 10 days, 60 days extra on staple goods between seasons. Season datings are April 1st and August 1st. For yarn and thread the commonest terms have been 2 per cent, 10 days, 1 per cent, 30 days, and net 60 days. End of month terms (E. O. M.) are sometimes given.

Woolen piece goods appear to be commonly sold on the basis of 10 per cent, 30 days, 8 per cent, 60 to 90 days, and 7 per cent, four months.

Hosiery.—At present there is little uniformity in terms or methods of sale. Nearly half the product seems to be sold to jobbers and the rest mostly to retailers. Extreme terms are net 60 days and 6 per cent, 10 days with season datings.

Wholesale dry goods.—2 per cent, 10 days, net 60 days is common, though terms vary widely.

Men's clothing.—There is no standardization for this line of trade. For cheaper cloth common terms are 1 per cent, 10 days, 30 days extra and net 60 days.

Women's outer garments.—The cash discounts are very high in this trade, the maximum running as high as 10 per cent. The minimum being 2 per cent, 10 days, 1 per cent 30 days and net 60 days.

Millinery.—Common terms are 6 per cent, 10 days, 60 days extra or 7 per cent, 10 days.

Men's furnishings.—The terms of sale vary widely, but are commonly 6 per cent, 10 days, 5 per cent, 30 days for collars with less liberal terms for shirts.

Boots and shoes.—Terms vary widely in this business. Formerly they averaged 2 per cent, 10 days, with net of 30 or 60 days.

Furniture.—Sales in carload lots frequently carry a 5 per cent discount and in smaller lots 2 per cent, 10 days, with net terms of 60 days, is common.

Musical instruments.—Before the War standard terms were 5 per cent, 30 days, net four months. Frequently, however, the retailer was granted terms extending over two or three years in order to enable him to do an instalment business with his customers. Recently, manufacturers have cut their terms to 2 per cent, 10 days, net 30 days.

Books.—The usual terms in the book trade are net 30 days or settlement at the end of each month. Cash discounts are not frequently given, though trade discounts of liberal amounts are commonly offered from the list price.

Agricultural implements.—The terms in this industry are complicated and usually long. The common method of distribution is from manufacturer to branch house, thence to retail dealer and finally to the farmer.

Further information on "terms of sale" may be derived from various issues of the *Federal Reserve Bulletin* between December, 1919, and November, 1920.

voice. It is also a common practise to make all bills for goods shipped within a given month, payable on the 10th of the following month, that is, the discount may be expressed, "2 per cent, 10th *proximo*."

SEASONAL DATINGS

Another practise which has become increasingly common in certain seasonal lines of industry should be noted. "Seasonal datings" are given. This means that the manufacturer offers an extra inducement to customers in order to secure their orders in the off season. For example, it is common in the rubber tire business to accept orders in December which will be made up and shipped to the customer as soon as possible, the bills being dated April first or May first. This means that the usual cash discount and net payment terms can be enjoyed by the customer at the expiration of the regular period following the spring dating. If, as it commonly happens, the payments in the rubber tire business are made on the basis of 5 per cent, 10th *proximo,* a dealer whose goods were shipped to him in the middle of the winter might take his cash discount on the tenth of May. Usually when terms are extended in this manner, trade acceptances are received from the purchaser.

It might on first thought appear that this practise results in an unwarranted extension of credit which may prove dangerous. However, the crux of the matter is that by extending credit in this fashion one of the serious disadvantages of "seasonal" business can be largely eliminated. The manufacturer can thus keep his plant investment working more evenly through the year, and can avoid the wastes resulting from a fluctuating body of employees. Further, the practise saves factory space because the goods can be shipped to the purchaser as soon as finished. Also the uncertainties of the market are in this manner very much reduced. The general tendency, therefore, is for this practise of seasonal dating to stabilize and lower prices. While it is true that an occasional purchaser may overstock himself as a result of the long credit

extended, it is probable that as a rule the gains more than counterbalance the losses incurred.

THEORY AND PRACTISE OF THE CASH DISCOUNT

The *cash discount* offered has no relation whatever to the trade discount (which usually serves merely to camouflage the actual purchase price). As the cash discount customarily offered is much greater than any reasonable interest on the unpaid bill until its stipulated due date, it is obvious that the purpose of the discount is to secure prompt payment. It therefore serves as a reward or premium for prompt payment, and a penalty for buying goods on credit.

Obviously, the customer who takes his cash discount is in a position to save a great deal of money on his annual purchases. He thus has an advantage over his competitors who through lack of funds or through carelessness fail to pay for their goods within the discount period. Many business men, particularly in the retail trade, say that their profits are really made because of the cash discounts.

Since, however, the deduction of the discount is left in the hands of the purchaser, it is very evident that he may be tempted to abuse the privilege by deducting the discount from his bill after the period has expired when he is lawfully entitled to do so. This so-called "cash discount piracy" has made a vast amount of trouble for credit men, and has led to much unfair discrimination between customers. The problem is a difficult one to deal with because of the competition which exists in most lines of business. Some concerns, however, abide strictly by the terms which they have laid down, and refuse to accept the checks of customers who attempt to take an unearned discount in this manner. The proper handling of this problem so as to "educate" the customer along ethical lines without losing otherwise desirable business is one of the credit man's delicate duties. The National Association of Credit Men has been very active in its attempts to stamp out the evil practise of taking unearned discounts, and has recently provided its members with the following form which they use for the instruction of their customers.

Are You Fair to Yourself and the Other Man?

You are not fair to *your own business* when you fail to earn the cash discount for it. You are not fair to the *other man's business* when you take a discount you have not earned. The various discounts below, with the annual interest rates to which they are equivalent, will tell you why:

	½%	10 days—net	30 days	=	9%	per	annum.
Can You	1%	10 "	" 30 "	=	18%	"	"
Afford	1½%	10 "	" 30 "	=	27%	"	"
NOT TO	2%	30 "	" 4 mos.	=	8%	"	"
Earn Your	2%	10 "	" 60 days	=	14%	"	"
Cash Discount	2%	30 "	" 60 "	=	24%	"	"
? ? ?	2%	10 "	" 30 "	=	36%	"	"
	3%	10 "	" 4 mos.	=	10%	"	"
	3%	30 "	" 60 days	=	36%	"	"
	3%	10 "	" 30 "	=	54%	"	"

NATIONAL ASSOCIATION OF CREDIT MEN
Forty-One Park Row **New York City**

FORM 22. Cash Discount Notice Approved by the National Association of Credit Men

The commonly alleged advantages of the cash discount may be briefly summarized as follows:

(*1*) It induces prompt payment, and thus permits a more rapid turnover of the seller's capital. (*2*) It somewhat reduces the credit risk by tending to shorten the actual terms of sale. (*3*) The costs of collection are probably somewhat reduced, as well as the losses from the presentation of unwarranted claims. (*4*) Probably the possibility of "taking the discount" encourages buyers to be more cautious in planning their expenditures to avoid overstocking themselves with goods. (*5*) It may be that the seller can, as a result of the cash discount, plan his own financial operations more accurately and anticipate his income within a given period, as would not be the case if all goods were sold on long terms without the advantage of the cash discount.

On the other hand, obvious disadvantages of the cash discount which have already been hinted at are:

(*1*) The discount is unfairly deducted. (*2*) Purchasers for large enterprises frequently insist upon special "favors." (*3*) Extra work in accounting is required. (*4*) The temptation to take advantage of the terms leads to a lowering of business standards on the part of purchasers. (*5*) The custom is probably unnecessary as an inducement for earlier payments. With the proper education of customers, net terms could be insisted upon without any discount held out as a "bait." Obviously, what the seller actually does is to add the discount to his real selling price.

On account of the many evils arising in practise through the use of the cash discount, there has from time to time been a definite movement toward the abolition of this practise in certain lines of business. It is a question, however, how much can be accomplished, as trade traditions die hard. When the seller has all the business which he wishes to do it is easy to be arbitrary in this matter, and to sell goods more nearly on a cash basis. This, of course, is the goal to be aimed at, since the cost of goods to the consumer would probably be considerably reduced if the custom of liberally extending mercantile credit were done away with. In particular cases much can be accomplished through the development of proper personal relations between the credit department and the company's customers. In general, however, the period in the business cycle will pretty definitely determine the progress which can be made along these lines.

COOPERATION WITH THE CUSTOMER

The abuses of mercantile credit are tremendous. No one party to the transaction, however, is to blame. The customers could not take advantage of sellers unless the sellers, as a body, permitted the practise. Many companies do not have properly organized credit departments, while in far too many cases the credit man has served largely as a "rubber stamp." The un-

warranted extension of credit leads to general loss. Not only is the seller injured, but also ultimate consumers, and the concerns from which the seller in turn makes his purchases. The greatest harm is probably done to the customer himself who succeeds in gaining credit when not entitled to it. *Easy* credit has led to an enormous number of failures in this country. Many a sales department has completely run away with the business which it represents to the extent that doubtful sales have been permitted, on the assumption that the aggregate volume of business would be sufficiently increased to outweigh the losses incurred. The whole principle, however, is wrong, and the evil effects resulting are cumulative, since loose business methods are thereby engendered.

Some companies, recognizing the general inefficiency of the average small merchant, have definitely made it their business to furnish information regarding the proper methods of keeping accounts and extending credits. In some cases this cooperation has been carried so far that cost accounting systems have been installed by the selling house, and periodic audits are made of the purchaser's financial condition.

It is not to be supposed, however, that the average seller can carry his missionary work to this extent. Through the company's representatives, particularly through the salesmen, a definite effort should be made to instruct the purchaser as to the evils of overbuying and of loose collections. He should be shown the advantage of paying bills when due and taking his discounts promptly. All efforts expended in this direction will do much to raise the tone of business, and will ultimately increase the profits of the selling house as well as of the purchaser. This more efficient conduct of business will also decrease the price of goods to the consumer, as business failures will be reduced.

The National Association of Credit Men have summed up in an excellent manner the aims of that type of constructive business service which may be rendered by credit grantors. The following is quoted from their pamphlet "Every Credit Man a Business Service Man."

WHAT IS CONTEMPLATED UNDER BUSINESS SERVICE AS RENDERED BY CREDIT GRANTORS

Business Service holds itself out to advise the consumer, dealer, jobber or manufacturer on matters of Business Administration, especially when there is evidence through dealings, direct or indirect, that there is need of assistance.

Business Service thus unites the Credit Man, as Manager of the Business Service Department, with the Selling Department of his business, eliminating all possibility of friction, and consequently insuring greater efficiency.

Business Service builds salesmen, because the salesman recognizing the principles upon which Business Service is based, readily cooperates; he sees that its aim is reciprocal, building for both the customer and the salesman.

Business Service holds itself out to cooperate with the customer, rather than operate against the customer, when the first signs of trouble manifest themselves.

Business Service keeps the debtor out of the Adjustment Bureaus and the Bankruptcy Courts, because the Business Service Credit Man scents weaknesses of administration before they are suspected either by the merchant himself or by those on the outside.

Business Service instructs the merchant, manufacturer, or jobber in Accounting in all its phases, indicates to him how to throw safeguards around all transactions—cash sales, handling of merchandise, or books of accounting, the extension of credit, the collection of accounts, insurance, law, and a multitude of miscellaneous matters.

Business Service presumes, when undertaken by a Credit Man, that the right kind of medicine will be prescribed for the merchant who needs it, according to his ability to absorb the medicine, and only as he needs it.

Business Service is distinctly a personal matter, and is not covered by a form, a book, a statement, or a system.

Business Service Credit Men know that merchants, manufacturers, accountants, credit men, are not made over night, that the way to build is to build one story at a time; if the merchant is weak in collections, training along that line will accomplish most, and so on, until the merchant is made whole.

Business Service is a living thing; it never dies; it constantly energizes the firm that gives it out, the Credit Men through whom it passes, the salesman who draws inspiration, the customer who is benefited, and the nation which thrives on the elevation of its business men, and is honored as they push out and take part in constructive commerce in the Family of Nations.

Business Service is the beginning of an end of the shiftless, dishonest merchant, pointing out to him that his shiftlessness is unpatriotic because in failing to keep records he cannot make an honest return to his government upon which to determine his tax.

Business Service helps the merchant who is honestly attempting to earn a place in the business community, obtain a name for fair and honest dealing; helps him to know the truth about his business and learn it from the manufacturer or wholesaler who is willing and competent to give it.

Business Service Men are helping national development, because Business Service when intelligently preached and practised builds up an efficient, wealth-producing body of merchants.

Business Service will help give a Financial Statement the proper basis upon which to extend credit, and will enable the debtor to obtain credit favors proportionate to his true financial standing.

Business Service binds customers to those who render the service. Where Business Service exerts its influence, competition for a customer's business gives way to considerations of service.

THE ABUSE OF MERCANTILE CREDIT

Another very important consideration has to do with the common misapprehensions regarding the value and significance of mercantile credit. The nearer the trade comes to the ultimate consumer, the less reason is there for an extension of credit. Credit is not capital; it merely facilitates the use of capital. Mercantile credit is in many instances nothing but a "convenience" which is frequently abused. It enables the purchaser to live ahead of his income and to put off the payment of his legitimate obligations. The sum of enjoyable goods is not thereby increased, but frequently diminished because of the lack of thrift which is encouraged by the too liberal granting of credit. A breathless procession is started from the manufacturer to the ultimate consumer, all finding themselves one lap behind their financial resources because of the credit practise.

There would be no loss, but on the contrary very great gain, if the entire practise of mercantile credit granting were in most cases abolished. From the economic point of view it has nothing whatever to recommend it except its "convenience." The use of such credit instruments as drafts and bills of exchange

which are payable at the time of delivery of goods should not be confused with the ordinary extension of credit when this matter is under discussion.

Much economic loss undoubtedly results from the policy sometimes followed by retailers who actively encourage buyers to open "accounts" which are to be used solely for the purchase of consumers' goods. In the same category may be mentioned the extension of credit in connection with the purchase of automobiles, pianos, phonographs, furniture, and such articles on the instalment plan. While in occasional instances thrift may be fostered by this practise, it is probable that in the majority of cases the effect is directly opposite.

MAKING COLLECTIONS

Little attention need be given in this connection to the problem of collections. If the credit department has been properly manned it will have thoroughly instructed purchasers as to the requirements of the selling house. Salesmen, also, will have been told that no exceptions or unwarranted concessions can be made by them in order to increase their sales. If, therefore, credit has been wisely granted, and the general policy of the selling house has been a dignified one, the problem of collections will presumably be reasonably simple.

Undoubtedly there will always be customers who are constitutionally opposed to parting with their money, even though they have a *constitutional* weakness for buying goods. The number of perplexing situations which may arise is legion, and the credit man must temper his policies to suit particular cases. His work is best when he can collect accounts in such a manner as to impress a customer with the fairness of his actions and the necessity of abiding by all agreements which are made.

Different collection policies are commonly followed at different periods in the business cycle. When business is hard to get the seller tends to be more lenient, both about his terms of sale and his collection of past due accounts. In the long run, however, this lax collection policy is reprehensible. There can be no financial gain as a result of the toleration of loose commercial practises. Though prompt payment should be

insisted upon as a general rule, in individual cases where the customer has been the victim of unfortunate circumstances all consideration should be given him. No gain results from trying to squeeze blood out of a turnip, provided that turnip still has possibilities for growth and may be able to yield a handsome amount of juice in the future!

One method sometimes adopted in dealing with past due accounts is that of charging the usual rate of interest on the full amount of the unpaid bill. In favor of this practise it is urged that justice and fairness demand that the customer who fails to abide by the terms of sale shall be penalized as compared with the one whose payments are prompt. Otherwise a premium would actually be put upon the failure of the buyer to live up to his agreement. It has further been stated that the imposition of the interest charge often has the effect of making a prompt "payer" out of a slow payer.

If collections are improved thereby, so that the turnover of receivables will be more rapid, it appears that the interest charge is fully justified in practise. It is important, however, to handle the matter with caution and to inform the customer definitely as to the policy of the selling house at the time when his order is accepted. Unless this caution is observed desirable customers might be lost because of irritation which naturally results from imposing the interest charge.

One of the chief difficulties in connection with the collection of past due accounts has been the low-calibred and whining attitude adopted by many credit men themselves. Having studied a large number of these letters, some of which have been submitted as examples of "effective" letters, the writer is led to wonder why some customers *ever* pay their bills! A more businesslike handling of the collection department, an absence of either bullying or whining, might bring very desirable results in the mercantile credit field. It is scarcely necessary to point out in detail the methods sometimes used in collecting past due accounts, either through attorneys or through collection agencies of different sorts. Needless to state, many large companies use their own so called "collection agencies" to strike terror into the hearts of their delinquent customers!

CREDIT INSURANCE

Within recent years there has developed a system of credit insurance which in this country is handled mostly by the American Credit Indemnity Company. The policies issued by this company are written on the assumption that a certain per cent of loss is "normal" in every line of business. The Credit Indemnity Company, therefore, insures the policy holder against losses to which he may be subject over and above this normal loss.

For purposes of credit insurance, the various lines of business are grouped according to their relative underwriting hazards, as ascertained by the company from experience data covering many years. The more stable commodities on which terms of sale are short generally fall within the first two groups (1 and 2) which have a "preferred" rating. The less stable or "seasonal" goods, on which profits are normally large or terms of sale long, are usually grouped among the more hazardous classes (3, 4 and 5). On the basis of 25 years of statistics the normal expectancy of loss for concerns grouped according to the annual volume of sales has been computed. These groupings, however, normally presuppose that sales are made only to customers who are given either first or second rating by the mercantile agencies.

Experience shows that the normal rate of loss varies from as low as one-tenth of one per cent to one and one-half per cent or even two per cent, depending upon (*a*) the line of business, and (*b*) the annual volume of sales. Naturally the type of management will also affect the situation. Taking an average of all industries, it is probable that the normal annual loss is considerably below one-half of one per cent of a year's sales. For those companies which carry insurance the average expectancy of loss is probably at least one-half of one per cent of the volume of sales.

The policy issued may be either "limited" or "unlimited." In the former case a maximum total liability is fixed in the policy beyond which losses are not covered. The unlimited form is probably more common and insures the policy holder

against abnormal losses to any amount. Further, there is incorporated a co-insurance clause which provides that the insured must himself bear a small portion of the risk. This amount is usually fixed at 10 per cent of the actual loss in the case of those accounts which are given the best credit ratings. Such a provision probably reduces the moral hazard which might arise through the taking of unwarranted risks by the insured company in extending its credit.

It should also be noted that a definite limit is set in the policy to the amount which the insured may recover on any one account to which he sells. This coverage varies according to the degree of the credit risk. The table herewith given, prepared by one of the leading companies, indicates what is regarded as a conservative maximum for insurance on the ratings specified.

TABLE 66

Conservative Maximum for Insurance on the Ratings Specified

Capital Rating or Financial Worth	First Credit Rating	Second Credit Rating
$1,000,000 and over	$100,000	$35,000
750,000	75,000	30,000
500,000	50,000	25,000
400,000	50,000	25,000
300,000	45,000	20,000
250,000	37,500	20,000
200,000	30,000	15,000
150,000	30,000	15,000
125,000	25,000	15,000
100,000	20,000	12,500
75,000	17,500	12,500
50,000	12,500	10,000
35,000	9,000	7,000
20,000	5,000	4,000
10,000	2,500	2,000
5,000	1,250	1,000

The practise of credit insurance seemed to be increasing in popularity during the post-war years when bad debt losses were abnormal. It is used in almost all lines of trade to some extent, and by concerns of all sizes. Probably, however, the medium-sized houses doing a business ranging from a few

hundred thousand dollars to two or three million dollars are the most common policy holders. Such companies are not so powerful financially that they can afford to build up sufficient reserves to cover possible abnormal losses.

Further, the practise of credit insurance has been found very helpful in recent years in connection with the policy of price guaranties followed by many companies. Naturally the purchaser can be more safely guaranteed against a drop in the market price of the commodity which he has bought if the guarantor, in turn, is insured against abnormal bad debt losses. It would seem, therefore, that a rather useful device has been discovered for assisting in stabilizing prices and reducing the risks of business.

It has frequently been contended that since normal losses are not covered by credit insurance, any concern which insures against abnormal losses which do not actually occur will thereby increase its operating expenses, and that this might result in an increase of price to the consumer. This argument, however, is scarcely valid when one recalls that the average premium paid amounts to about one-tenth of one per cent of the annual sales, being somewhat larger for the smaller companies and considerably lower for the larger companies. The premium is of course increased as the risk grows greater, as indicated by the classification of the business and by the lower credit rating of the customer. In such cases the co-insurance required is higher, so that the actual recovery from losses would be considerably reduced. Yet even for the poorer risks the policy rate is relatively very low.

It has further been urged that the possibility of insuring against credit losses will lead to carelessness in credit granting. The answer to this line of argument is apparent, in view of the fact that various lines of business are carefully graded according to their general degree of risk, and that the rates increase as credit is extended to those purchasers whose Dun or Bradstreet rating is inferior. Also, the increase of the co-insurance required should in itself be sufficient to induce great caution on the part of the credit grantor. Finally, the very nature of the insurance makes it necessary for the credit department of a

business to be constantly watching its accounts with a view to preventing any account becoming larger than the amount of the limit or "coverage" set in the policy for concerns of a given capital and credit rating. Constant checking and caution are needed in order to enable the policy holder to abide by the provisions laid down by the insurance company.

Bad debt losses in times of business uncertainty are one of the greatest hazards which must be taken by a business concern. In fact the average loss from bad debts during the period 1920-1922 was actually greater than the fire losses against which insurance is always carried by every well-managed concern. The bad debt losses fluctuate with the changes in the business cycle, and were in 1921 almost five times as great as in 1920. In 1920 the losses were nearly ten times as great as in 1919. In such times, therefore, credit insurance becomes a matter of the most vital interest to every business which may be subject to abnormal losses. For the past few years financial failures have continued high.

THE NATIONAL ASSOCIATION OF CREDIT MEN

The National Association of Credit Men was organized in 1896 with a membership of 600. The present membership is about 30,000 mercantile and bank credit men, and the Association is still growing rapidly.[1] The Association during the past third of a century has been unceasing in its endeavors to put credit granting on a more scientific basis and to improve the standards of business practise and ethics all along the line. It has appointed committees of experts to deal with all matters vital to the successful conduct of business, particularly in its financial aspects, and distributes to its membership large quantities of useful material.[2] The actual accom-

[1] The bankers' section of the National Association of Credit Men is known as the "Robert Morris Associates." At a recent date 257 banks and three commercial paper brokers were represented in the organization. These members had 313 personal representatives from 28 states and 66 different cities.

[2] The committees appointed by the Association for the year 1922 were as follows: Adjustment Bureau, Banking and Currency, Bankruptcy Law, Business Meetings, Business Service, Commercial Arbitration, Credit Education and Management, Credit Interchange Bureaus, Fire Insurance and Prevention, Foreign Credits, Investigation and Prosecution, Legislative, Mercantile Agencies' Service, Advisory Council.

plishments and aims of the association are perhaps best summed up by the following statement recently circulated through the central office:

WHAT MEMBERSHIP IN THE NATIONAL ASSOCIATION MEANS

The greatest contribution of the National Association of Credit Men to American business will ALWAYS be in helping the men who are handling credits in banks and business houses to become better equipped for their work—in less danger of making costly blunders, because through Association contact they are broader visioned and better informed.

But through the cooperation which the Association has brought about, achievements of vital importance have been attained. Some of them are:

1. In legislation.
   (*a*) Regulating sales in bulk.
   (*b*) Penalizing the giving of false statements.
   (*c*) Regulating doing business under assumed name.
   (*d*) Penalizing giving bad checks, etc., and also,
   (*e*) Have kept legislation hurtful to credits off the statute books.

2. The establishment and maintenance of the par system of clearing checks; estimated as saving business annually $135,000,000.

3. Prosecution of fraudulent failures and protection of members against impositions.

4. Exchange of credit information through bureaus and direct with one another.

5. Conserved assets in failures and embarrassments through co-operation directed by Adjustment Bureaus.

6. Extended use of the financial statement as a basis of credit.

7. Focused minds of sellers and buyers on rules that make for orderliness in business transactions.

The Association also furnishes information to credit departments along many lines; for instance, regarding standing of collection agencies, insurance companies, and the like.

The "Canons of Commercial Ethics" adopted by the National Association of Credit Men are so vital in their application to the financial conduct of industry, particularly in its credit relations, that everyone may to much advantage give

careful study to these 12 canons. The underlying principle which has been for the last quarter of a century stressed in season and out of season by the National Association of Credit Men is summed up in the one word, *cooperation.*

Canons of Commercial Ethics

Adopted by the National Association of Credit Men

Canon No. 1.—It is improper for a business man to participate with a lawyer in the doing of an act that would be improper and unprofessional for the lawyer to do.

Canon No. 2.—It undermines the integrity of business for business men to support lawyers who indulge in unprofessional practises. The lawyer who will do wrong things for ONE business man injures ALL business men. He not only injures his profession, but he is a menace to the business community.

Canon No. 3.—To punish and expose the guilty is one thing; to help the unfortunate but innocent debtor to rise is another; but both duties are equally important, for both duties make for a higher moral standard of action on the part of business men.

Canon No. 4.—In times of trouble, the unfortunate business man has the right to appeal to his fellow business men for advice and assistance. Selfish interests must be subordinated in such a case, and all must cooperate to help. If the debtor's assets are to be administered, all creditors must join in cooperating. To fall in such a case is to fall below the best standards of commercial and association ethics.

Canon No. 5.—The pledged word upon which another relies is sacred among business gentlemen. The order for a bill of goods upon which the seller relies is the pledged word of a business man. No gentleman in business, without a reason that should be satisfactory to the seller, may cancel an order. He would not ask to be relieved of his obligation upon a note or check, and his contracts of purchase and sale should be equally binding. The technical defense that he has not found himself in writing may avail him in the courts of law, but not of business ethics.

Canon No. 6.—Terms of sale as a part of a contract touching both net and discount maturity are for buyer and seller alike binding and mutual, unless modified by previous or concurrent mutual agreement.

No business gentleman may, in the performance of his contracts, seek small or petty advantage, or throw the burden of a mis-

take in judgment upon another, but must keep his word as good as his bond, and when entering into a contract of sale faithfully observe the terms, and thus redeem the assumed promise.

Canon No. 7.—It is always improper for one occupying a fiduciary position to make a secret personal profit therefrom. A member of a creditors' committee, for example, may not, without freely disclosing the fact, receive any compensation for his services, for such practises lead to secret preferences and tend to destroy the confidence of business men in each other. "No man can serve two masters."

Canon No. 8.—The stability of commerce and credits rests upon honorable methods and practises of business men in their relations with one another, and it is improper for one creditor to obtain or seek to obtain a preference over other creditors of equal standing from the estate of an insolvent debtor, for in so doing he takes, or endeavors to take, more than his just proportion of the estate and therefore what properly belongs to others.

Canon No. 9.—Cooperation is unity of action, though not necessarily unity of thought. When the administration of an insolvent estate is undertaken by the creditors through friendly instrumentalities, or when, after critical investigation, creditors representing a large majority of the indebtedness advise the acceptance of a composition as representing a fair and just distribution of a debtor's assets, it is uncooperative and commercially unethical for a creditor to refuse the friendly instrument or the composition arbitrarily and force thereby a form of administration that will be prejudicial and expensive to the interests of everyone concerned.

Canon No. 10.—Our credit system is founded on principles, the underlying elements of which are cooperation and reciprocity in interchange. When ledger and credit information is sought and given in a spirit inspiring mutual confidence, a potent factor for safety in credit granting has been set at work.

The interchange of ledger and credit information cannot fulfil its best and most important purpose unless guarded with equal sense of fairness and honesty by both the credit department that asks for the information and the credit department that furnishes it.

Recognizing that the conferring of a benefit creates an obligation, reciprocity in the interchange of credit information is an indispensable foundation principle; and a credit department seeking information should reciprocate with a statement of its own experience in the expectation of getting the information sought; and a credit department of which information is sought should respond fairly and accurately because the fundamentals of credit interchange have been observed in the manner the request was made of it.

Failure to observe and defend this principle would tend to defeat the binding together of credit grantors for skilful work—a vital principle of the credit system—and make the offending department guilty of an unfair and unethical act.

CANON No. 11.—The foundation principle of our credit structure—*cooperation*—should dominate and control whenever the financial affairs of a debtor become insolvent or involved, that equality thereby may be assured to the creditors themselves and justice to the debtor.

The control of any lesser principle produces waste, diffusion of effort and a sacrifice of interest, material and moral, with a separation of creditor and debtor that is offensive to the best laws of credit procedure.

Cooperation and unity save, construct and prevent; therefore, individual action pursued regardless of other interests in such situations whether secretly or openly expressed by either creditor or debtor, is unwise and unethical.

CANON No. 12.—The healthy expansion of commerce and credits, with due regard to the preservation of their stability and healthfulness, demands an exact honesty in all of the methods and practises upon which they are founded. Advertising is an important feature in business building; it should represent and never misrepresent; it should win reliance and never cover deceit; it should be the true expression of the commodity or the service offered. It must be deemed, therefore, highly improper and unethical for advertisements to be so phrased or expressed as not to present real facts, and either directly or by implication to mislead or deceive. In this department the finest sense of honesty and fairness must be preserved, and the right relations of men with one another in commerce and credits clearly preserved.

CHAPTER XXIV

THE DISTRIBUTION OF EARNINGS

Relative importance of the distribution policy—The financial budget—Rules for the administration of income—The problems of depreciation—Should appreciation be recognized?—The rate of depreciation—The creation of a sinking fund—Declaration of dividends—Stability of dividends desirable—Stock dividends—The corporate surplus—Distribution policy followed by leading industrial concerns, all manufacturing and trading companies, selected group of 250 industrial companies, group of 144 leading companies—Relation between capitalization and distribution policy.

PROVIDED the financial management of a company has been sound through all stages of its development from the inception of the enterprise, the problem of distributing the earnings is really of minor significance. In most cases, granting that the officers are honest and possessed of average ability, a reasonably conservative if not particularly intelligent policy will be followed. There should be less likelihood of going wrong at this point than at many others in the financial administration of a business.

Sometimes, of course, it is true that the money actually earned is unwisely distributed, either to owners or in unduly large salaries paid to officers. Likewise, there is sometimes a tendency to expend earnings too lavishly in the extension of the fixed investment of the business. As a rule, however, it may be safe to say that the most serious mal-administration of finances has resulted from the too easy borrowing of the capital of outsiders, or through the misuse of capital which has been paid in by overenthusiastic but not well informed stockholders. There is a tendency, either on the part of the individual himself or of an industrial company, to have a good deal of respect for money which has actually been earned. Consequently, a misapplication of such funds is less common than when capital is secured in a more easy manner. Yet there are occasions when the business concern, as well as the individual, seems to find it

easier to make money than to save it or properly to dispose of the earnings. Therefore, in order to round out our treatment of the subject of business finance, very brief attention will be given to a few aspects of the problems relating to the proper administration of the income of a business concern.

It is of primary importance that a company shall at all times plan to finance operations in such a manner that the possibilities of loss and waste arising through uncertainty shall be reduced to the minimum. Most of the difficulties which arise in business administration are the result of lack of *foresight,* which, in turn, is pretty largely the result of lack of *hindsight.* In other words, a proper attempt has not been made to coordinate the various activities of the business in the light of past and present experience with a view to planning the most suitable course for the future.

It is scarcely necessary to point out by means of concrete examples the folly of attempting to run any kind of a business as a series of more or less separate departments, each of which may be following individual policies without regard to the fundamental interests of the business as a whole. In order to insure the highest degree of financial success there must be a careful coordination of all departments of business through the *central financial control.* Since the only justification for the existence of a business concern is its ability to earn profits for the owners, it seems scarcely necessary to reiterate the fact that all operations should be planned with this end in view, though it is surprising to find how many concerns apparently conduct their affairs without any specific plan for their guidance.

THE FINANCIAL BUDGET

Not all businesses can plan their operations in a uniform way. Much will depend upon the size of the enterprise and its peculiar problems arising from the nature of business carried on. Every well-managed concern, however, should endeavor to forecast its particular needs, having determined upon a desirable future policy. In all cases an attempt should be made within definite limits to determine what the expenditures of the

business must be during a given period, and to decide upon the most expeditious methods of meeting those expenditures. Frequently, it is desirable to set definite expense limits beyond which no department of the business may be allowed to go for any purpose. In other cases more flexibility is desirable.

For some concerns definite estimates may be made quarterly or even monthly, while for others a year would appear to be the most convenient and satisfactory period to choose. A good deal will depend upon the "seasonal" requirements of the business and the number of inventory turnovers which it ordinarily has each year. An all year round business could well formulate its plans month by month, while a "one season" business would scarcely find it practicable to formulate a definite budgetary plan covering less than a year's operations. Certain types of public utility companies can definitely plan their financial operations years in advance.

This method of planning and coordinating a company's affairs is now popularly referred to as *budgeting* the business. Much vogue has been given the term by several well-known accountants, who believe that they have discovered something new and revolutionary in business administration. The idea of "budgeting" is at present being widely capitalized. As a matter of fact, however, there is absolutely nothing new in principle about the practise of "budgeting." The chief *new* aspect is the term applied. Every soundly managed concern attempts to plan its operations and coordinate its functions in such a manner as to secure the highest degree of effectiveness in financial administration.

Of course, as has been repeatedly pointed out in preceding chapters, the average business enterprise is *not* well managed, and has not been operating in such a manner as to secure the readily attainable financial results. However, in dealing with various phases of business finance an attempt has been made to point out underlying principles which should be followed in order to insure success. There seems, therefore, to be no particular gain in reiterating the suggestions which have already been made or camouflaging them by means of a new epithet. "Budgeting" as applied to business administration means

simply the application of sound common sense in industrial affairs. The more extended the analyses which have been made of a company's own affairs as well as of general business and economic problems, the easier it is to plan finances in such a manner as to secure the highest returns on capital invested, consistent with safety and service.

GENERAL DISTRIBUTION POLICY

If any general rules were to be laid down regarding the administration of earnings, they might be summed up under the following heads:

1. The maintenance policy should be a liberal one.
2. Generous depreciation reserves should be set up.
3. Ample allowances should be made for contingencies of all sorts, either through the creation of reserves or otherwise.
4. The soundest policy will ordinarily demand that an industrial concern make provisions through sinking fund or otherwise for the retirement of its credit obligations or even of its preferred stock.
5. A conservative dividend policy should at all times be followed so that capital stock may attain and maintain an "investment" position.
6. After reasonable dividends have been awarded the owners, a large proportion of earnings should be reinvested in the business until such time as the reinvested earnings can no longer be profitably used.

It is scarcely necessary to give any detailed attention to the question of adequate maintenance of the business. Any intelligent officers know what expenditures are required for upkeep, repairs, and the like. Unless an attempt is being made to "milk" the concern and purposely to exploit its resources, it is perfectly obvious that generous allowances should be made for maintenance. The immediately easy path of undermaintenance is sometimes followed by a company which wishes

to represent its net earnings as being higher than they actually are. "Over-maintenance" is a much rarer occurrence. There are, however, instances in which a "hidden" or "secret" reserve has been created as a result of charging to operating accounts by way of maintenance, betterments, extensions, and the like, what might properly be regarded as capital outlays. Well-known examples of this policy are to be found among some of the New England textile mills. Such methods also were more or less followed by the old Carnegie Steel Company. No practise could be safer, though on general principles it is desirable that the accounts be kept in such a manner that the owners will have a more definite knowledge of their equities in the business. "Over-depreciation" is probably found in such a company as the General Electric, which is ultra-conservative in its accounting.

THE PROBLEM OF DEPRECIATION

So far as depreciation is concerned the policies followed are innumerable. Sometimes depreciation is regarded, as it properly should be, as an operating expense, and so carried in the accounts at a uniform rate each year. In many instances, however, depreciation is regarded as a deduction from income either before or after dividends have been paid. Under such circumstances the amount allowed for depreciation usually fluctuates in accordance with the annual net earnings. Some companies, therefore, as a result of careful estimates allow a fixed percentage each year for depreciation. Others regulate their depreciation allowance according to their financial prosperity, setting aside a large amount in some years and a small amount or none at all in other years. Finally, many concerns recognize in their accounting no depreciation whatever, acting on the assumption that if the property is kept in first-class repair, depreciation is adequately cared for through maintenance. In most cases no policy could be more thoroughly unsound from the financial point of view.

Irrespective of the ordinary repairs and upkeep of a physical property, depreciation is an inevitable problem to be reckoned with. Depreciation comes (*a*) through the normal wear and

tear, (*b*) through obsolescence, and (*c*) through inadequacy. No matter how constantly repaired, there is always a time after which the economic usefulness of a piece of machinery or even a building is largely ended. It has depreciated to the extent that it must be replaced by a new unit. Likewise, as long as there is improvement in the arts, newer and better methods of manufacturing will constantly be discovered. Therefore, a physical unit of equipment which is perfectly satisfactory and almost as good as new today may be rendered hopelessly uneconomical and unsatisfactory tomorrow through the invention of a more effective appliance. Indeed, it might be utter folly for a company to continue to use the equipment which it has installed, even though its actual "life" might continue for many years. As the business is conducted to make profits it must either use the most approved equipment or be outdistanced by its competitors. Through obsolescence, therefore, enormous depreciation constantly results. This sort of depreciation is much greater in some lines of industry than in others, but must always be reckoned with. Finally, the mere growth in volume of a business or changes in the nature of the demand for its product may render its plant or equipment inadequate though under other circumstances no changes might need to be made. It is obviously quite impossible to predict how soon a given plant or piece of machinery may have to be scrapped, because, even though not displaced by new inventions, it is not of a suitable size for the further economic operation of the company as the volume of business has been enlarged.

Depreciation, therefore, is a fact which cannot be escaped. Also, in addition to the suggestions already made there are many accidents and contingencies which from time to time lead to unusual and wholly unexpected deterioration of plant and equipment.

Some explanation was made in an earlier connection regarding the accounting methods of handling depreciation.[1] If depreciation has been estimated as an operating expense, it has been recorded as a part of the unit cost of producing goods. If,

[1] See Chapter XIII, page 306.

on the other hand, it is carried as a charge against income after all operating expenses have been met, it is common to set up a "depreciation reserve" which indicates the company's estimate of the deterioration which has actually taken place in the physical assets. This reserve may be either a mere bookkeeping entry or in rare instances may be represented by a specific "fund" appropriated out of earnings. The common procedure of conservative financing is to reinvest in the business that portion of the earnings which fairly represents the accrued depreciation during the year. It would obviously be misleading to include such an amount as part of the "surplus" of the business.

SHOULD APPRECIATION BE RECOGNIZED?

Incidentally, it may be noted that in some instances a claim has been made that the "appreciation" of a company's property, whether tangible or intangible, will go far to counterbalance any actual depreciation of fixed assets. In the public utility field, for example, the California Railroad Commission has admitted the principle of appreciation as applying to the valuation of public service corporations in the state. Appreciation has also sometimes been recognized in connection with railroad valuations. The problems of public utility finance, however, are far different from those of industrial finance. It is undoubtedly true that land owned by an industrial concern frequently appreciates in value. Further, because of the rapid increase in prices in recent years it might also be impossible to duplicate a given plant and equipment for less than twice the original cost. Under such circumstances there has of course been an "appreciation" in value which might be of great significance provided the property were changing hands.

It is manifestly most absurd, however, for the present owners of a business, except in rare instances, to take into consideration this appreciation in making their financial plans or in distributing their earnings. Appreciation is a very uncertain quantity indeed and should never obscure the fact that depreciation continues inexorably, even in the "appreciated" units of

physical property. If there has been an actual increase in value, all this condition really means to the owner of the business is that the basis on which depreciation should be computed has been increased! This fact would necessitate a larger annual appropriation for depreciation! The useful life of the property would have been changed not one whit.

This simple explanation should be sufficient to indicate how utterly irrelevant is the question of appreciation when considered as an offset to depreciation in an industrial enterprise. For a company to be blinded by the fact of theoretical appreciation to such an extent that it overlooks the *actual* depreciation is merely another exercise in attempting to raise oneself by one's bootstraps. If a property is to be sold, it is naturally proper to play up any supposed appreciation in arriving at the selling price. Those responsible for the financial management of a business, however, would be utterly misled if they should formulate their policies according to the actual or supposed market value of the property. This market value at a given time may be much lower or even much higher than the real operating value of the company. In the internal records of a company, therefore, it would seem generally unwise to make any allowance for appreciation, unless in the case of some so-called personal service corporations or retail establishments in which good-will may be the chief element of value.

THE RATE OF DEPRECIATION

The actual rate which should be allowed for annual depreciation will vary from industry to industry and even from locality to locality. No uniform rule can safely be laid down. Within very rough limits it is sometimes asserted that the average factory building depreciates at the rate of 3 to 5 per cent each year, that standard equipment frequently depreciates at the rate of 10 per cent or more, and that the depreciation of patterns, tools, and the like, may vary from 20 or 25 per cent to 100 per cent. Obviously, when the rate approaches 100 per cent the simplest policy is to regard the replacement as merely an operating expense, the article in question being considered a

portion of the annual "supplies" needed for operating the business.

The various methods for computing depreciation and the distribution of the annual rates are matters which can be worked out by each company according to the best engineering practise. (*a*) It is perhaps commonest to divide the original value of the unit to be depreciated by the number of years of its theoretical "life," and to allow an equal annual amount for depreciation during the life of the unit. (*b*) The practise may, however, be varied, depending upon conditions, in such a manner as to have the annual allowance increase by a graded amount each year on the assumption that the rate of depreciation is naturally greater the longer the property has been in use. (*c*) An ultra-conservative method of handling the situation would be to grade the allowances in the opposite direction, that is, to set aside a higher percentage in the earlier years than in the later stages. (*d*) Finally, the method of providing for depreciation intermittently, depending upon the amount of a company's earnings, has already been referred to. From the economic point of view the absurdity of this practise is sufficiently obvious, when it is recalled that the *rate* of depreciation has no relation whatever to the annual financial performance of a business. For practical reasons, however, this policy may sometimes be expedient.

In recent years the federal tax laws have operated to call the attention of industrial concerns specifically to the need of making adequate allowances for depreciation. All corporations are in accordance with the present law allowed to deduct from their gross income before paying taxes a reasonable allowance for the exhaustion, wear and tear of property, including a reasonable allowance for obsolescence. An opportunity is also given to deduct a reasonable amount for the amortization of certain property acquired after the entrance of the United States into the War and used for war purposes. Finally, deduction allowances are also permitted for the depletion or exhaustion of "wasting" assets with particular reference to oil wells, mineral mines, and the like. The law, however, does not go farther than to suggest that the depreciation and amortization

allowances shall be fair and reasonable. This of course means that sound engineering practise will be followed in the matter. As it is to the interests of every income tax payer to reduce the basis on which tax is paid to the smallest possible amount, it may now safely be assumed that the average industrial concern is making fairly adequate allowances out of earnings for depreciation, provided profits are actually being realized.

Reference to a preceding table (Table 26, page 347) will be of interest in this connection. It appears that for all incorporated manufacturing concerns in the United States the deduction for depreciation and depletion was in 1926, 2.81 per cent of the total gross income, of which 2.40 per cent was depreciation. This amounted to about 3 per cent of the total investment of such concerns. The amount of this deduction, also, was equal to about 30 per cent of the average net income before deducting federal taxes and depreciation and depletion allowances. In the mining and quarrying business the rate deducted was 11.12 per cent of the total gross income. Nearly 60 per cent of the net income before income taxes, depreciation and depletion, was distributed in this manner. Other figures may be studied with profit. Depreciation policy can very radically affect the amount of net profits available for dividends.

THE CREATION OF A SINKING FUND

The question of the creation of a sinking fund in order to retire the senior obligations of an industrial concern needs merely passing mention. Obviously there are several possible purposes for creating such a fund. (*a*) It may enable a company to "make a market" for its securities through purchase on the open market. (*b*) Such a fund gives some assurance to the creditor or the holder of preferred stock that definite tangible values will be maintained to support his claims. (*c*) The creation of a sinking fund helps to assure the investor that the obligations will be met at maturity. (*d*) The company also may find it much easier to sell its securities to carry on additional financing or refunding if a sinking fund is set up. The practise is now very commonly followed by most companies.

In certain instances a sinking fund is absolutely essential to sound financial management. It is especially needed when there is little tangible property to protect the obligations which have been issued. Further, when the business is such that the assets are constantly "wasting away," as in the case of mines, oil wells, and timber lands, a sinking fund or some such similar arrangement is imperative when money has been borrowed as well as when capital has been raised through the issue of shares which have been actually paid in. Finally, when the business is of an unstable or uncertain sort and the future cannot be clearly predicted, it is important that the investor's risks be minimized through the creation of a sinking fund which will guarantee the retirement of his securities within a reasonable period of time.

The various methods of providing for the maintenance of a sinking fund have been referred to in another connection.[1] It should here be noted, however, that the sinking fund must not be confused with a depreciation reserve. The purpose of the former is to enable a company to pay off its creditors, and thus increase the equities of the common stockholders in the business. The purpose of the depreciation fund is merely to *maintain the equity* of the original investment. Sound financial management, therefore, would require that most industrial concerns which borrow fixed capital, because of the uncertainties of their business should set up adequate sinking fund reserves in order to assure themselves of a comfortable position in the future.

Various other reserves are from time to time created, depending upon the particular needs of the business. These sometimes lead to a rather heavy inroad upon the net earnings otherwise available for dividend payments. In recent years reserves for contingencies of many sorts have been created. Particularly common have been the reserves for bad debt losses, shrinkage in investments, and depreciation in value of inventory. Such contingent reserves are very essential in certain lines of business where the risks are great and unpredictable. Even the largest banks in the United States during the

[1] See page 99, Chapter V.

lean post-war years found it necessary to create huge reserves of this sort. Their losses through the financial failure of their customers and the shrinkage of the values back of some of their supposedly "secured loans" amply demonstrated the need of these reserves.

DECLARATION OF DIVIDENDS

From the legal point of view dividends may ordinarily be declared whenever a company's balance sheet shows a surplus of assets over liabilities, provided the directors decide that it is wise to make payment. Sometimes, however, specific restrictions are imposed upon the declaration of dividends under certain circumstances, either through special charter provisions or through indentures accompanying senior security issues. It is usually provided by law in this country that dividends shall not be paid out of "capital," or before past impairments of capital have been made good. Aside from these restrictions, dividends may presumably be declared out of present earnings, past earnings, or through an increase in the surplus account, by whatever means secured.

While in theory there is thus much freedom allowed a company as to its dividend policy, in practise the situation is radically different. No conservatively managed business would presumably declare any dividends except out of earnings, and only a portion of net earnings available for dividend payments would be actually paid out. Some of the general considerations which must be borne in mind by directors in deciding their policy at a particular time are such as the following:

(*a*) What has been the past record of earnings of the company? (*b*) In what part of the year were the present profits made? (*c*) What are the future earning prospects? (*d*) How strong is the company's cash position? (*e*) What plans does the company have for the future development of its business?

It is also at times highly important to know how the dividend policy will affect the sale of securities when new financing of any sort is contemplated. Depending upon circumstances,

the rate of dividend may sometimes be increased, or dividends may be declared when otherwise they might be passed, in order to make a better market for the sale of new securities. A very interesting recent example of the increase of the regular dividend in order to attract new investment capital is furnished by the experience of the American Telephone and Telegraph Company, which a few years ago raised its rate from 8 per cent to 9 per cent so that $90,000,000 worth of new stock might more readily be sold. It is further vitally important at times to decide whether extensions of property should be made out of earnings retained in the business to the immediate deprivation of the stockholders, or whether capital funds should be raised in another manner.

With these general considerations in mind the directors of a company can at a given time decide the rate of common stock dividend which it may seem desirable to declare. In the case of preferred dividends, there is, as a rule, no discretion allowed the company as to the *rate* which must be paid, though if conditions do not seem to warrant, it is perfectly permissible to *pass* such dividends. Ordinarily, however, the protective features incorporated in preferred stock indentures will operate to destroy or weaken the control of the common stockholders if cumulative dividends have been passed for a certain length of time. Upon the other hand, these same protective clauses commonly restrict indirectly the dividend payments which can be made on the common stock. Such restrictions may specify that common stock dividends shall not exceed a certain amount or shall be paid only out of net earnings realized after a certain future date and after provision has been made for the retirement of a certain proportion of the preferred stock. It is not necessary, however, to indicate the various provisions made in such matters.

STABILITY OF DIVIDENDS DESIRABLE

As a rule *stability* of dividends is to be desired. If the record of a company is consistent in this regard, its stock will be a better investment and will attract a more desirable class of

owners. Also the stock will sell at a much higher price, even though in the aggregate the rate of dividends declared might be lower than when an intermittent and fluctuating dividend policy is followed. Finally, with a record of stability, the stock will not only be more desirable as collateral for loans, but also new financing of the company on favorable terms will be rendered easier.

In order to assure a reasonably consistent dividend policy it is highly essential that a company shall be most conservative at all times. In the beginning, dividends should not be paid at all, even though earned, until the business becomes "seasoned" to such a degree that its financial policies can be carefully planned and the future can be pretty definitely forecasted on the basis of past performance. Further, it is absolutely essential at all times to pay out less than is earned, and in good years to "plow in" a large proportion of the earnings in order to strengthen the company for the inevitable "lean" years. Many difficulties arise when it becomes necessary to change a rate of dividend which has come to be regarded as a "permanent" rate. It is, therefore, much wiser, if it seems desirable temporarily to increase the rate, to let it be known that the increased amount is an "extra" which has no guaranty whatever of continuance.

It would not be expedient for all companies to follow the same policy with regard to dividend declarations. If the ownership is within few hands, a fluctuating dividend policy may occasion no particular difficulties, and may best suit the needs of the small body of owners. If, on the other hand, the stock is widely held, a much more cautious and consistent policy should normally be followed.

Again, it is well known that in certain lines of business, companies have either a "feast" or a "famine." The earnings may fluctuate so widely that it might be extremely difficult, or at any rate impracticable, to attempt to build up investment reserves which might make possible an even distribution of dividends from year to year. Such is frequently the case in the textile industry and in the steel business. As a rule it may be stated that those companies enjoy the most regular earnings, which

have a broad market for their product, and which deal in goods that are directly consumed by the public but which are not ordinarily sold to other corporations or middlemen. This is merely another way of stating the fact that price fluctuations are less pronounced in the case of finished goods than in semi-finished goods and in raw materials. Those companies, therefore, which deal in raw materials, or which manufacture "capital" goods to be sold to a limited number of purchasers for use in further production, will normally be subject to a considerable degree of fluctuation in their earnings.

Arbitrary rules, therefore, cannot be laid down in this matter of dividend policy. Stability is at all times to be aimed at. On the other hand, the assertion is wholly unwarranted that the *maximum* dividend declared should at all times be less than the *minimum* earnings of any year, without reference to the dividend declaration of the particular year. If the earnings of a business are relatively stable, this rule would be an excellent one; but when the earnings may normally fluctuate from almost zero to a very high percentage on the capital, it might work very great hardship indeed upon the stockholders to be deprived of high dividends earned in the better years. The proper procedure in such cases is to attempt to secure a more even "load factor" relative to the business cycle so that a more stable policy can be arrived at. In actual practise this stable equilibrium may be almost impossible to attain. The perfectly safe rule, therefore, is that dividends should *ordinarily* not be declared except out of the present year's earnings.

It has sometimes been asserted that there are conditions under which it is both permissible and desirable for a company to borrow in order to pay its dividends. In fact one well-known writer on the subject has recently asserted that money should, when necessary, be borrowed to pay preferred dividends in order to maintain the investment record of the stock! Such advice would seem to be wholly pernicious unless the dividend has been amply earned and borrowing had to be resorted to merely because the earnings were not available in cash form. Even under such circumstances, it is questionable whether a company is justified in contracting a loan in order

to meet a dividend payment. If the cash position is so weak, it is probable that the credit position of the company may be seriously endangered. Under such circumstances additional borrowing merely serves still further to weaken the company's credit.

In order to obviate the difficulties of the situation just discussed, a company might resort to the payment of dividends in "scrip" or dividend "warrants." When earnings have been ample, but the cash position is weak, it is much wiser for a company to issue its promissory notes to the stockholder, with or without interest, than to borrow money in order to make payment. Thus dividends can be declared without increasing a company's loan obligations and without adding to its capital liabilities in the form of increased stock issues. However, the practise of issuing scrip dividends is a questionable one, and may be subject to grave abuses. Ordinarily it is a much better policy to refrain from issuing obligations of this sort, and to let the stockholders wait until the cash position warrants the distribution of earnings.

STOCK DIVIDENDS

"Stock" dividends are very commonly resorted to. The reasons for the distribution of a company's surplus in this manner are numerous.

1. In the first place, though earnings may have been high, and even though the cash position may be strong, the company may have good reasons for wishing to retain the cash in its business as well as to increase the number of ownership shares. A double gain may thus result through the conservation of its cash position, and through the ultimate wider distribution of ownership. In this manner the stockholder is by a pleasant "ruse" forced to leave his share of the earnings in the business. He can, of course, sell his new stock if he wishes to obtain cash.

2. When as a result of the large accumulation of earnings or of a past high rate of dividend, stock is selling at a very high

price on the market, there may be a gain in further dividing the certificates of ownership through the issue of additional shares, so that the market price will be reduced. A more manageable market price will probably lead to a wider distribution of ownership and to more active trading in the stock.

3. Finally, a company may wish, by increasing its number of shares, to conceal the actual extent of its earnings so far as the general public is concerned. By increasing the stock basis on which dividends are declared the actual rate per share will, of course, be lowered.

In this connection it is well to call attention to the recent discussion as to whether stock dividends are to be regarded as income, and as such taxable under the Federal Income Tax Law. Fortunately this much mooted question was decided in favor of the stockholder by the Supreme Court of the United States in March, 1920, in the case of Eisner *vs.* Macomber. In accordance with this decision stock dividends are not to be counted as income in the hands of the recipient.

In spite of certain theoretical arguments to the contrary, the writer agrees heartily with this decision. By paying a stock dividend the company instead of distributing its earnings has merely increased the number of shares into which its total assets are divided. The stockholders' aggregate equities in the property are just the same as before the distribution, though both the book value and the market value of his shares have been reduced. If, for example, a stock dividend of 100 per cent should be declared, the value of the stockholder's original shares would presumably be reduced by one half. He actually gains nothing, except an additional piece of paper, though he can presumably sell his stock on the market in order to raise cash. This act, however, would merely amount to parting with a portion of his equity in the business just as if before the declaration of the dividend he had sold a portion of his original stock. Accordingly, the stockholder's position relative to the company has not been changed through the declaration of the stock dividend, nor has he received any income out of which a tax could be paid. He could only raise money to pay a tax

by selling a portion of his original equity in the business! Obviously, therefore, the share of stock received cannot logically be regarded as income.

Finally, it should be noted that stock dividends frequently represent little more than "paper profits." When the surplus of a company is distributed in this manner it frequently means no more than a mere bookkeeping entry. The surplus is written down and the capital stock is increased by a proportionate amount. The company's supposed "earnings" left in the business will normally be in the form of fixed investment or inventory, either of which may be subject to great shrinkage in times of price deflation. Hence, it very frequently happens that instead of receiving an "income" when stock dividends are declared, the shareholder is merely *deprived of a possible income,* which later he loses altogether by having left his share of the earnings in the business! The owner can be absolutely sure of only that portion of the earnings which he takes out of the business in cash.

It is interesting to note that as a result of the favorable decision rendered by the courts there was throughout 1920 an unusually large amount of stock dividends declared. It is extremely fortunate for the solvency of many a concern that its dividend policy took this form rather than an attempt to make cash payments. According to recent estimates made by the United States Treasury Department, stock dividends totaling $2,328,702,915 were issued by 109,311 corporations making income tax returns in 1922.

Recent Data on Stock Dividends

For all corporations in the United States, stock dividends in 1926 amounted to $757,649,610, or about 9 per cent of net profits after taxes, as compared with $5,945,293,000 cash dividends, or about 72 per cent of net profits. In 1925 the proportion of stock dividends was only 6.7 per cent.

The Federal Trade Commission recently made an analysis of 2,846 corporations reporting dividends for the entire period 1913-1926, and paying stock dividends in the period 1920-1926. The aggregate of *all* dividends paid by these companies during the first 7 years (1913-1919) was around 100 per cent of the average capital stock outstanding. The aggregate dividends paid during the later 7-year period (1920-1926) was close to 140 per cent of the average capital stock at the beginning and end of the period.

For 2,971 corporations paying stock dividends in either period and reporting dividends for the entire 14-year period, the following facts are significant:

Percentage distribution of dividends for period 1913-1926

	1913-1919	1920-1926
Cash	77.9 per cent	55.0 per cent
Stock	19.0 per cent	44.6 per cent
Other	3.1 per cent	0.4 per cent

For these companies the increase in the absolute amount of dividends paid during the second period as compared with the earlier was, for *cash* dividends—73 per cent, and for *stock* dividends—476 per cent.

For the same companies, the disposition of the total distributable surplus was as follows:

	1913-1919	1920-1926
Undistributed	57.2 per cent	37.8 per cent
Cash	33.3 per cent	34.2 per cent
Stock	8.1 per cent	27.8 per cent
Other	1.3 per cent	0.2 per cent

About 45 per cent of all dividends paid by these companies during the later period was in stock.

Finally, a study of the corporate surplus attributable to each period indicates that the following policy was followed with respect to dividend distribution and retention of earnings in the business:

Distribution of surplus attributable to each period

	1913-1919	1920-1926
Undistributed	45.1 per cent	5.7 per cent
Cash	42.7 per cent	51.9 per cent
Stock	10.4 per cent	42.1 per cent
Other	1.7 per cent	0.3 per cent

So far as these 2,971 companies are concerned, therefore, it appears that practically all of the surplus earned during the later period was distributed, and virtually no earnings properly chargeable to that period were reinvested in the business. This is a distinct reversal of the policy which was common in earlier years. During recent years the flotation of securities has been so easy that the public has frequently been asked to furnish money through the purchase of securities, which it was formerly believed that the company and old stockholders should furnish through the reinvestment of surplus earnings.

THE CORPORATE SURPLUS

One of the most interesting phases of the problem under discussion has to do with the desirable amount of surplus earnings which should be put back into the business over a period of years. It is also significant to consider what disposal should actually be made of that surplus.[1]

Obviously, it would be highly undesirable for all types of concerns to follow the same "surplus policy." The amount of

[1] For a discussion of the *sources* of surplus the reader is referred to Chapter XIII, pp. 306-309.

earnings put back into the business will be a factor of many variables. The policy will be influenced by the nature of the industry and its stability of earnings, by the probable future of the particular industry, and the state of its mechanical perfection, and also by the age and size of the particular establishment and the possibilities for further profitable expansion.

The average public utility company has generally found it unwise to build up a large surplus. This is accounted for by two reasons. First, public utility regulation provides that a fair return on a fair investment must be allowed the company. With this reasonably definite assurance of earnings, there is no great gain in reinvesting any considerable portion of the earnings, nor is definite competition allowed of a sort which might endanger the future earning power of the business. Again, companies have found it difficult when rate questions have been raised to persuade the regulating commissions that they are entitled to a rate sufficiently high to enable them to pay a fair rate on their capital and surplus. It is assumed by the public authorities that previous earnings must have been too high, otherwise a surplus could not have been built up. Evidently, therefore, if a return is not to be allowed to the owners on the earnings which they reinvest in the business, it is folly for them to create any considerable surplus.

The attitude of public regulatory bodies and sound business practise have frequently been at variance in this matter. As long, however, as there is danger that the owners will not be allowed a fair return on the additional investment built up in this conservative fashion, it is scarcely probable that public utility surpluses will amount to more than merely nominal figures. In the case of industrial corporations, on the other hand, no such difficulty exists. Many a concern has greatly strengthened its investment position by ploughing back surplus earnings to such an extent that the water is thereby "squeezed" out of the common stock. One of the best known examples of the consistent adoption of this policy is presented by the financial history of the United States Steel Corporation. In 1921 its surplus account exceeded a half-billion dollars, a greater amount than its entire common stock issue.

It is likewise important for a company to decide upon the most desirable method of disposing of that surplus which is left in the business. In general several different policies may be followed, depending upon individual conditions.

(*1*) Money left in the business may be spent on improvements in the property itself, or in extensions which will increase the volume of business without in any way changing the character of the business. (*2*) The earnings may be used to develop the business in new directions, such as the creation of by-product industries or the integration of the business in some direction. (*3*) Earnings thus retained may be utilized for the purchase of other concerns which have heretofore been competitors in the field. (*4*) The surplus retained may be largely kept in cash or in more or less liquid investments, with or without an attempt to control through investment channels the business of other corporations.

In the light of earlier discussions, it is scarcely necessary to deal further with this question. At all times it is highly desirable that a sufficiently large "liquid" surplus be maintained. A strong cash position brings with it many advantages, particularly in connection with the purchase of goods. There is also an increasingly favorable opportunity for the industrial concern to invest a portion of its reserves without running the usual investment risks which result when various types of stocks and bonds are purchased. Many companies find it desirable, as has been pointed out in an earlier connection, to invest surpluses temporarily in treasury certificates, bank acceptances, or commercial paper. All securities of this type have an early maturity, and are not subject to the fluctuations in value which sometimes make the usual investments undesirable. On the other hand, caution must be exercised by a company to guard against misapplication of its cash reserves or the mere inactivity of such reserves. An unduly large amount of cash should not be retained, nor can a company afford to let it lie idle.

The actual amount of surplus which it is desirable to create through earnings is frequently decided by the investment needs of a particular business. If new financing is anticipated or will

probably be necessary as the business grows, it is then a most desirable policy to strengthen the stockholders' equities through the retention of a considerable proportion of the earnings. Thus new financing may be effected on more liberal terms, either through the sale of senior securities or more probably through the issue of additional stock. Even a business which is not normally regarded as stable or within the investment class may establish itself as a sound concern provided it is willing to retain a large proportion of earnings until it becomes seasoned.

As a guiding principle, the statement may again be made that a company is justified in reinvesting earnings over and above a fair dividend to its stockholders until such time as the owners might realize a more attractive yield on their investment by applying their earnings to some other business of an equal degree of risk. Until the business has reached a point when it no longer needs new capital, it would appear that the owners should scarcely expect outside investors to be interested if they themselves have not sufficient confidence in the undertaking to be willing to leave a portion of their earnings in the enterprise. As a practical matter, however, it may be wise for the individual shareholder to diversify his risks.

In this connection one more point should perhaps be noted. As the federal tax law now stands there is the possibility that in the discretion of the Commissioner of Internal Revenue a tax of 25 per cent may be imposed upon the net income of a corporation, in addition to the normal income tax, provided it appears that such gains and profits are permitted to accumulate beyond the reasonable needs of the business.[1] Obviously, the purpose of this law was to prevent evasion of income tax payment by permitting the earnings to accumulate in the business

[1] For the calendar year 1921 the normal corporate income tax was 10 per cent of the amount of the net income in excess of the credits allowed. These credits cover (*a*) interest upon United States bonds which has been included in gross income; (*b*) a deduction of $2,000 for a domestic corporation, the net income of which is $25,000 or less; (*c*) the amount of any war profits and excess profits taxes imposed by act of Congress for the same taxable year. For 1927 the rate was 13½ per cent of the amount of net income in excess of the $2,000 exemption as above indicated.

instead of distributing them by way of dividends. Such an accumulation might, of course, later be distributed as a "stock dividend" which in accordance with the court decision would not then be subject to the income tax. To prevent such a manipulation of the earnings to the gain of the stockholder and of the business itself, but obviously to the disadvantage of the Government from an income tax point of view, this discretionary power has been left to the Commissioner of Internal Revenue. As a result of the enactment of this provision, many concerns may have been induced to distribute earnings which might with greater wisdom have been retained in the business.

There are, on the other hand, numerous instances of companies which retained a large proportion of their earnings during the years of inflated prices in order to increase their working capital to a satisfactory point without endangering their position by excessive borrowing. Such companies, if they were not subject to any considerable loss during the post-war years, probably found that they had within the business a "free" surplus far in excess of all immediate needs. Under such circumstances, obviously, the wisest policy was to pay out a large proportion of the surplus to their stockholders, who had been deprived of a portion of their earnings while the money was most needed in the business. This situation accounted for the high rate of dividends paid by certain very conservative concerns.

Companies whose large surplus is accounted for in this manner might be most unwise to pay the penalty of a greatly increased income tax on their undistributed earnings. It may be much more desirable to let the individual stockholders have their share of the original earnings, and make their own peace with the tax collector. The matter, however, must be decided in individual cases according to the average stockholdings. The problem will normally be worked out in accordance with where the incidence of the tax would fall heaviest, whether on the corporation or on the stockholder's personal income.

Due to unusual prosperity and freedom from serious price fluctuations, many concerns have recently found themselves in an unnecessarily strong cash position, so that they are now

TABLE 67

Income of All Active Corporations (416,528) and Its Distribution, 1925

(Value Unit: $1,000,000)

Number	Type of Business	Gross Sales or "Operating Revenue"	Cost of Goods Sold or "Operating Expense"	"Operating Ratio"	Gross Profit on Sales: Amount	Gross Profit on Sales: Per Cent of Sales	Miscellaneous Income and Receipts: Amount	Miscellaneous Income and Receipts: Per Cent of Total Receipts	Total Receipts	Interest Paid: Amount	Interest Paid: Per Cent of Total Receipts	Depreciation and Depletion: Amount	Depreciation and Depletion: Per Cent of Total Receipts
1	Agriculture and Related Industries	$592	$400	67.6	$192	32.4	$202	25.5	$794	$35	4.3	$44	5.5
2	Mining and Quarrying	3,866	2,674	69.2	1,192	30.8	1,070	21.7	4,936	104	2.1	562	11.4
	Manufacturing:												
3	Food Products, Beverages, and Tobacco	$13,138	$10,886	82.8	$2,253	17.2	$269	2.0	$13,407	$123	0.9	$188	1.4
4	Textiles and Products	7,473	6,128	81.9	1,345	18.1	254	3.3	7,727	77	1.0	154	2.0
5	Leather and Products	1,469	1,202	81.8	267	18.2	47	3.1	1,516	13	0.9	20	1.3
6	Rubber and Products	1,423	1,072	75.4	351	24.6	47	3.2	1,470	23	1.6	27	1.9
7	Lumber and Wood Products	2,803	2,138	76.3	665	23.7	168	5.6	2,971	47	1.6	121	4.1
8	Paper, Pulp, and Products	1,446	1,083	74.9	363	25.1	47	3.1	1,493	22	1.5	49	3.3
9	Printing and Publishing	1,736	1,094	63.1	642	36.9	550	24.1	2,286	19	0.8	51	2.2
10	Chemical and Allied	6,425	4,521	70.3	1,904	29.7	652	9.2	7,077	87	1.2	307	4.3
11	Stone, Clay, and Glass Products	1,457	980	67.3	477	32.7	47	3.2	1,504	13	0.9	58	3.8
12	Metal and Products	17,474	13,809	79.0	3,664	21.0	1,677	8.7	19,151	176	0.9	484	2.5
13	All Other Manufacturing	2,240	1,591	71.1	649	28.9	79	3.4	2,319	20	0.9	47	2.0
14	Total Manufacturing	$57,084	$44,504	78.0	$12,580	22.0	$3,837	6.3	$60,921	$622	1.0	$1,506	2.5
15	Construction	$1,799	$1,477	82.2	$322	17.8	$510	22.1	$2,309	$29	1.3	$52	2.3
16	Transportation and otber Public Utilities	1,160	688	59.3	472	40.7	10,751	90.3	11,911	1,068	9.0	596	5.0
17	Trade	38,135	31,598	82.8	6,537	17.2	1,725	4.3	39,860	246	0.6	250	0.6
18	Public Service — Professional, Amusements, Hotels, etc.	1,268	750	59.2	518	40.8	1,573	55.4	2,841	67	2.4	109	3.8
19	Finance, Banking, Insurance, etc.	4,616	4,352	94.3	264	5.7	8,199	64.0	12,815	1,437	11.2	202	1.6
20	Combinations—predominant industry unknown	243	205	84.4	38	15.6	80	24.9	323	8	2.6	9	2.8
21	Grand Total	$108,763	$86,646	79.7	$22,117	20.3	$27,948	20.4	$136,711	$3,617	2.6	$3,330	2.4

Number	Type of Business	Net Profits: Amount	Net Profits: Per Cent of Total Receipts	Net Profits: Per Cent Distribution	Federal Taxes: Amount	Federal Taxes: Per Cent of Total Receipts	Federal Taxes: Per Cent of Net Profits	Net Profits after Taxes: Amount	Net Profits after Taxes: Per Cent of Total Receipts	Net Profits after Taxes: Per Cent of Fair Value of Capital Stock	Dividends Paid: Total	Dividends Paid: Per Cent Distribution	Dividends Paid: Cash: Amount	Dividends Paid: Cash: Per Cent of Net Profits after Taxes	Dividends Paid: Stock: Amount	Dividends Paid: Stock: Per Cent of Net Profits After Taxes	Dividends Paid: Total—Per Cent of Est. Fair Value of Capital Stock	Capital Stock: Estimated Fair Value	Capital Stock: Per Cent Distribution	Ratio of Total Receipts to Fair Value Capital Stock	Number
1	Agriculture and Related Industries	$23	2.8	0.2	$9	1.1	38.2	$14	1.8	1.2	$35	0.6	$31	221.4	$4	28.6	3.1	$1,125	1.2	.71	1
2	Mining and Quarrying	321	6.5	3.4	55	1.1	17.2	266	5.4	3.8	339	5.9	335	125.9	4	1.5	4.9	6,931	7.3	.71	2
	Manufacturing:																				
3	Food Products, Beverages, and Tobacco	$482	3.6	5.2	$67	0.5	13.8	$415	3.1	8.2	$384	6.7	$312	75.1	$72	17.3	7.6	$5,066	5.3	2.65	3
4	Textiles and Products	317	4.1	3.4	49	0.6	15.4	268	3.5	6.5	213	3.7	186	69.4	27	10.1	5.2	4,134	4.3	1.87	4
5	Leather and Products	49	3.3	0.5	9	0.6	18.5	40	2.7	5.2	49	0.9	39	97.5	10	25.0	6.3	775	0.8	1.95	5
6	Rubber and Products	132	9.0	1.4	15	1.0	11.7	117	7.9	19.2	34	0.6	33	28.2	1	.9	5.6	610	0.6	2.41	6
7	Lumber and Wood Products	160	5.4	1.7	25	0.8	15.5	135	4.5	5.9	133	2.3	120	88.8	13	9.6	5.8	2,288	2.4	1.30	7
8	Paper, Pulp, and Products	104	7.0	1.1	14	0.9	13.5	90	6.0	9.3	68	1.2	64	71.1	4	4.4	7.0	966	1.0	1.55	8
9	Printing and Publishing	176	7.7	1.9	23	1.0	13.2	153	6.7	12.5	114	2.0	100	65.3	14	9.1	9.3	1,221	1.3	1.87	9
10	Chemical and Allied	711	10.0	7.6	78	1.1	11.0	633	8.95	9.7	506	8.8	478	75.5	28	4.4	7.8	6,491	6.8	1.09	10
11	Stone, Clay, and Glass Products	169	11.2	1.8	23	1.5	13.5	146	9.7	14.4	108	1.9	79	54.1	29	19.8	10.7	1,011	1.1	1.49	11
12	Metal and Products	1,643	8.6	17.6	222	1.2	13.5	1,421	7.4	10.6	774	13.5	714	50.2	60	4.2	5.8	13,377	14.0	1.43	12
13	All Other Manufacturing	164	7.1	1.8	22	0.9	13.1	142	6.1	8.0	107	1.9	99	69.7	8	5.6	6.0	1,784	1.9	1.30	13
14	Total Manufacturing	$4,109	6.7	44.1	$547	0.9	13.3	$3,562	5.85	9.5	$2,491	43.4	$2,224	62.4	$267	7.5	6.6	$37,724	39.6	1.61	14
15	Construction	$125	5.4	1.3	$18	0.8	14.1	$107	4.6	12.0	$82	1.4	$70	65.4	$12	11.2	9.3	$882	0.9	2.62	15
16	Transportation and otber Public Utilities	1,698	14.3	18.2	186	1.6	11.0	1,512	12.7	8.6	1,084	18.9	1,007	66.5	77	5.1	6.1	17,631	18.5	.68	16
17	Trade	1,045	2.6	11.2	145	0.4	13.9	900	2.3	8.9	597	10.4	506	56.2	91	10.1	5.9	10,149	10.7	3.92	17
18	Public Service — Professional, Amusements, Hotels, etc.	192	6.7	2.1	29	1.0	14.8	163	5.75	9.8	117	2.0	108	66.2	9	5.5	7.1	1,665	1.8	1.71	18
19	Finance, Banking, Insurance, etc.	1,790	14.0	19.2	180	1.4	10.1	1,610	12.6	8.7	976	17.1	897	55.7	79	4.9	5.3	18,505	19.5	.69	19
20	Combinations—predominant industry unknown	16	5.0	0.2	2	0.7	14.2	14	4.3	2.6	13	0.2	12	85.7	2	14.3	2.4	535	0.6	.60	20
21	Grand Total	$9,316	6.8	100.0	$1,170	0.85	12.6	$8,146	6.0	8.5	$5,734	100.0	$5,190	63.6	$544	6.7	6.0	$95,150	100.0	1.44	21

lending, in the aggregate, more than two billion dollars at a high interest rate on "call," to be used in stock market speculation.

DISTRIBUTION POLICY FOLLOWED BY LEADING INDUSTRIAL CONCERNS

Table 67 shows for all corporations and industries the relation between income and its distribution in 1925.

It has commonly been stated by conservative financiers that a well-managed concern should put back into the business one dollar for every dollar declared in dividends. From earlier analyses it will be recalled that the average surplus of leading industrial concerns amounts to as much as 20 or 25 per cent of the total balance sheet liabilities. Frequently this surplus will increase to 40 or 50 per cent of the outstanding common and preferred stock, and will be an even greater percentage of the plant account. It may be interesting in this connection, therefore, to examine very briefly the average dividend and surplus policy which has been followed by large numbers of leading industrial concerns.

From Table 68 it appears that in the more prosperous years all types of industrial companies were following a reasonably conservative dividend policy. In 1916 and 1917, for example, the proportion of net earnings distributed in dividends was considerably less than half the amount available for this purpose. In the "leaner" years the ratio runs much higher. This fact indicates a definite attempt on the part of the companies to keep their dividend record stable. No essential difference can be discovered between the policies followed by the two different sets of companies. Both groups appear to have paid out in the aggregate slightly more than 50 per cent of their earnings during the eight-year period 1911-1918. The actual amount distributed in dividends by all of these companies was $3,240,000,000 during the period, while the amount actually earned on the capital stock was $6,010,000,000. It is evident, therefore, that exactly 54 per cent of the earnings were distributed.

Table 69 shows that in the prosperous years 1916 and 1917,

the actual amount reinvested was far higher than in any other years. It appears, however, that during the years of great inflation, 1918-1920, leading industrial companies departed somewhat from their earlier policies, and began to pay out their earnings rather recklessly. The figures for 1920 are particularly significant when one recalls that, in addition to the actual cash dividend payments, nearly $800,000,000 of stock dividends were also declared. That a sufficiently conservative

TABLE 68

STATEMENT OF THE CAPITAL AND FINANCIAL RESULTS OF OPERATION OF IMPORTANT INDUSTRIAL COMPANIES, 1911-1918[1]

(*Unit: $1,000,000*)

A. FARM AND HOUSEHOLD SUPPLIES

Item	1911	1912	1913	1914	1915	1916	1917	1918
1. Total Assets	$2,252	$2,759	$3,218	$3,416	$3,668	$4,398	$5,251	$5,278
2. Total Liabilities (Excl. funded debt)	288	374	484	528	544	699	1,152	1,389
3. Funded Debt	313	280	323	339	350	392	383	407
4. Capital Stock	1,317	1,646	1,892	1,964	2,067	2,382	2,499	2,349
5. Net Income	144	189	227	203	284	488	522	371
6. Interest paid on funded debt	15	14	17	17	18	20	20	18
7. Amount Earned for Capital Stock	128	175	211	186	265	468	502	353
8. Dividends paid on Capital Stock	73	101	192	135	150	200	193	169
9. Per Cent of Earnings Distributed to Stockholders	57	58	91	73	57	43	38	48
10. Rate of Return Earned (per cent) on Capital Stock	9.74	10.61	11.13	9.46	12.84	19.65	20.10	15.03

B. INDUSTRIAL MATERIAL AND EQUIPMENT

Item	1911	1912	1913	1914	1915	1916	1917	1918
1. Total Assets	$4,604	$5,013	$5,227	$5,306	$5,890	$6,809	$8,155	$8,382
2. Total Liabilities (Excl. funded debt)	378	441	527	531	854	941	1,651	1,937
3. Funded Debt	974	1,069	1,071	1,062	1,010	1,025	1,132	1,112
4. Capital Stock	2,784	2,981	3,062	3,160	3,295	3,469	3,589	3,402
5. Net Income	265	309	342	229	444	999	886	627
6. Interest paid on Funded Debt	43	46	47	46	46	47	51	52
7. Amount Earned for Capital Stock	222	263	295	183	398	952	835	574
8. Dividends paid on Capital Stock	189	167	183	157	224	360	424	323
9. Per cent of Earnings Distributed to Stockholders	85	64	62	86	56	38	51	56
10. Rate of Return Earned (per cent) on Capital Stock	8.00	8.82	9.63	5.80	12.08	27.45	23.25	16.89

[1] The basic data from which the above relations have been computed were assembled by Jean Paul Muller.

TABLE 69

Dividend and Surplus Policy of Industrial Corporations, 1915-1921

(*Unit: $1,000,000*)

Year	Dividends Paid (Group of Companies Tabulated by Harvard Committee on Economic Research)	Earnings Put Back into Business. (144 Leading Companies Tabulated by Wall Street Journal)
1915	$422	$354
1916	550	921
1917	680	695
1918	650	445
1919	580	463
1920	602	382
1921	541	*400* (deficit)

policy was not followed is clearly shown by the fact that the group of 144 leading companies reported a net deficit of $400,000,000 in 1921, following a low reinvestment of earnings in 1920 and an abnormally high dividend distribution. For 2,971 corporations reporting their dividend policy during each year, 1913 to 1926, it appears that 57.2 per cent of earnings were retained in the business in the period 1913-1919, and only 37.8 per cent in the period 1920-1926.

In Table 70 light is thrown upon the war and post-war distribution policy of the more important industrial companies. It appears that, while during the period 1914-1921 the surplus earnings retained amounted to $2,860,000,000, there was also an increase in capital liabilities of $2,165,000,000. The net gain in surplus, therefore, from the balance sheet point of view, was only $695,000,000. On the other hand, the increase in working capital by an amount of $2,270,000,000, or more than 100 per cent, might indicate a more liquid position in 1921, were it not for the fact that in this period there had actually been a decrease in inventory, very largely through shrinkage in value, of $2,015,000,000. Cash and investment securities *not* of subsidiary companies amounted in 1921 to a little more than 30 per cent of the working capital reported. More light would be thrown on the question if there were more certainty as to the actual value of these so-called "investment" securities.

TABLE 70

DISTRIBUTION POLICY OF 144 LEADING INDUSTRIAL CORPORATIONS FROM 1914 TO 1921

Earnings retained for surplus (net)	$2,860,000,000
Increase in capital liability (less stock dividends)	2,165,000,000
Increased surplus minus increased liabilities	695,000,000
Increase in working capital	2,270,000,000
Cash and investment securities (not of subsidiaries)	1,376,000,000
Decrease in inventory (1920-1921)	2,015,000,000
Number which failed to add to value of common stock (1915-1921)	14
Number which added less than $20 per share to value of their common stock (1915-1921)	48
Number which added from $20 to $50 per share to value of common stock	43
Number operating at a deficit in 1921	69
Number declaring dividends (1921)	111
Number declaring unearned dividends (1921)	58
Number reporting deficit after dividend declaration (1921)	90
Total deficit reported (1921)	$546,673,000
Average deficit for companies reporting deficit	6,070,000
Maximum deficit reported	65,459,000

The actual situation appears not to be so favorable when detailed analyses are made for the year 1921. It appears that 69 of the 144 concerns operated at a deficit during the year. In spite of this fact, 111 companies declared dividends, 58 of which declared dividends either wholly or in part unearned during the year. Therefore, the number reporting a deficit for the year after dividend declaration is increased to 90. The average deficit reported amounted to more than $6,000,000 for each company, while the maximum deficit was in excess of $65,000,000. Figures of $15,000,000 and $20,000,000 were extremely common.

In this connection it is very significant to find that $1,033,-889,000 of the increased capital liability of these companies was accounted for by the security issues of seven companies. The following tabulation shows the extent of this increased capitalization for the several companies, as well as the deficit incurred by each, during 1921.

TABLE 71

RELATION BETWEEN INCREASED CAPITALIZATION AND DISTRIBUTION OF EARNINGS, 1915-1921

(*Unit: $1,000,000*)

Company	Increased Capitalization (excluding Stock Dividends)	Deficit for 1921 (After Cash Dividends)	Cash Dividend on Common Stock in 1921	Value Added to Common Stock During Seven Year Period (1915-1921)
General Motors Company	$263.9	$ 65.5	1%	$ 3.01
Bethlehem Steel	155.2	(3.9) (surplus)	5%	163.45
Texas Company	136.7	8.8	2.75%	10.78
Armour & Company	136.3	37.3	2%	53.71
Swift and Company	133.9	19.8	8%	24.74
U. S. Rubber	110.4	17.3	2%	13.17
Du Pont	97.6	14.4	8%	116.73
Total	$1,034.0	$163.1	....	....

Only one of these companies which enormously increased capitalization, the Bethlehem Steel Corporation, actually made money in 1921. The remaining six companies with one very unimportant exception, not only operated at a deficit during 1921, but also increased this deficit, in most cases very appreciably, by declaring dividends on their common stock. Consequently the aggregate deficit reported by these companies after the declaration of dividends amounted to $163,100,000 or almost 41 per cent of the net deficit reported by the entire group of (144) companies during 1921. This rather tragic situation indicates that those companies which were standard bearers in expansion of their capitalization, also led with almost equal stride in the retreat which ended in the financial debacle of 1921!

With the exception of Du Pont de Nemours and Armour & Company, the increase in value of common stock as a result

of earnings reinvested during the seven-year period is practically negligible for those companies which report these huge losses. In other words, these companies, after their tremendous volume of business and marvelous expansion, began the year 1922 in a financial position actually no better than that which they faced at the opening of 1915, in spite of the reverses at that time caused by the European War. They not only had increased the asset value of their common stock by an insignificant amount, but were also facing a continuance of the terrific deficits of the preceding year. Two of these companies Swift and Du Pont) reported a deficit of many millions even in 1920, after the declaration of dividends, while Armour & Company merely broke even. The General Motors Corporation shows the most astounding drop from a retention of earnings for surplus in 1920 amounting to more than $14,000,000 to a deficit of more than $65,000,000 in 1921. The actual decrease in financial performance during this one year amounted to about $80,000,000!

A further analysis shows that almost 10 per cent of the companies here studied failed to add to the value of their common stock by reinvestment of earnings during the entire period. In other words, they decreased instead of increased the equities behind the common stock. Ninety-one companies, in addition, added through reinvested earnings less than $50 per share of common stock over a period of seven years. It is reasonable to assume, therefore, that only in the 39 remaining companies was an amount reinvested approximating or exceeding the proportion paid out in dividends. The showing of this entire group of companies would doubtless have been much better had the computations ended with the year 1918.

It is interesting to note that some of the companies which suffered most in 1921, have in recent years, through scientific planning and exceptionally good management, attained a position of extraordinary financial strength. The Du Pont company, through its 23 per cent ownership of General Motors common stock and otherwise, now has a concealed surplus probably near $1,000,000,000! The General Motors Corporation holds cash or equivalent in excess of $200,000,000, and on

the average reinvests about 40 per cent of net income each year (43 per cent for the period 1909-1927). All corporations in the United States in 1925 retained scarcely 30 per cent of net income (including stock dividends), and in 1926 only 19 per cent.

CHAPTER XXV

FINANCIAL DIFFICULTIES AND FAILURES

The aim of business finance is to *prevent* failures—Causes of financial difficulties analyzed—The one underlying cause and its numerous manifestations—Business failures and the business cycle—Methods of averting threatened failure—The purpose and procedure of reorganization—Receivership proceedings—Bankruptcy—The Bankruptcy Act—The financial wastes of bankruptcy—The work of adjustment bureaus—The rules of the game.

THE aim of the preceding chapters has been to point out the most effective methods of financing a business in its numerous activities. From time to time as occasion has warranted, the difficulties which inevitably arise from the failure to follow sound principles of finance have been definitely indicated. It would seem, therefore, that no particular gain can arise from further detailed study of the conditions and policies which have been the subject of previous examination. Consequently, only the briefest attention will be directed in this connection to certain problems which arise when a concern has departed from the methods of sound finance.

The writers of textbooks on finance have frequently appeared to exaggerate the importance of financial involvements, reorganizations, failures, and the like. In fact it would almost appear that some have been disposed to regard reorganizations and receiverships as the most important aspect of business finance! Such an overstressing of pathological conditions seems wholly unwarranted to the present writer. The aim of the science of business finance should be to develop those principles which, if adhered to, will enable the business man to chart his course in such a manner that business failures will be avoided. Further, most of the intricate problems which arise in connection with corporate reorganizations have to do with legal technicalities rather than with finance *per se,* and the various adjustments which must be made are commonly in-

fluenced as much by psychological considerations as by simple financial principles.

Many attempts have been made to outline the causes of business failures or to classify failures according to the different types, to distinguish between business, financial, economic and legal failures, or to classify the "internal" and "external" causes of failures. Much ingenuity has been from time to time displayed in the rather futile effort to label failures according to some logical scheme. The difficulty has arisen largely through the failure to recognize the fact that the various so-called "causes" of financial embarrassment are usually merely different manifestations of one fundamental cause which manifests itself in countless forms.

CAUSES OF FINANCIAL DIFFICULTIES ANALYZED

Financial embarrassments and failures have been attributed to excess competition, changes in the demand for goods, failure to maintain the capital unimpaired or the paying of dividends out of capital instead of out of earnings, to overexpansion, and

TABLE 72

FAILURES IN THE UNITED STATES CLASSIFIED BY CHIEF CAUSES
(*Bradstreet's*)

Cause	Per Cent of Total			
	Number		Liabilities	
	1927	1926	1927	1926
A. Due to Faults of Those Failing:				
Incompetence	34.5	33.9	20.4	18.9
Inexperience	5.2	5.1	5.2	3.4
Lack of capital	34.9	32.7	32.9	29.7
Unwise credits	1.4	1.7	4.4	2.6
Extravagance	.5	1.3	.4	.7
Neglect	1.1	1.5	.4	1.1
Speculation	.3	.4	1.1	1.5
Fraud	3.6	3.8	3.7	5.1
Total	81.5	80.4	68.5	63.0
B. Not due to Faults of Those Failing:				
Failure of others	1.3	1.2	4.0	2.7
Competition	2.4	2.6	1.6	1.4
Specific conditions	14.8	15.8	25.9	32.9
Total	18.5	19.6	31.5	37.0

to the lack of sufficient capital. Causes have also been classified as to those over which the management itself has control and those which operate independently of the management.

It is probably true, however, that with the exception of comparatively rare instances when a business is ruined as a result of some wholly unpredictable catastrophe, and with the exception of calamities directly caused by war, *practically every business failure can be traced to ineffective management of greater or less degree.* Such mismanagement, barring dishonesty, is always the result of incompetence displayed in administering the concern's affairs. This incompetence may have developed very recently, it may have been at all times present, or it may have been manifest only in connection with the launching of the enterprise.

As a matter of fact, it is probable that the larger proportion of failures and difficulties result from bad judgment shown at the very inception of the business. The greater number of enterprises which are launched, as has been clearly pointed out in Chapter III, have no economic justification whatever. As they do not sufficiently meet any of the conditions essential to successful operation, it could hardly be expected that anything short of a miracle would enable them to avoid failure or long continued embarrassment. Such businesses are practically doomed from birth. They are industrial imbeciles which should never have been brought into the world. It requires little scrutiny to discover the real cause of their financial difficulties, and in most cases an early death by failure would be an economic blessing.

When this huge group of perfectly impossible and wholly ineffective financial abortions, monstrosities, imbeciles, and foundlings have been eliminated, it may be broadly stated that the particular display of incompetence or bad judgment which leads to financial difficulties manifests itself almost uniformly in one way—*overextension.* This term, of course, is very general. The overextension may arise in many different connections. There may be overbuilding and excessive investment in fixed assets. There may be overbuying, leading to unwarranted investment in inventory, perhaps in the raw state.

There may be overproduction within a given plant at a specific time, leading to the "freezing" of still further capital. Again, credit may be overextended so that too much working capital is tied up in slow or doubtful receivables. The company may also be guilty of overselling, a policy which frequently leads to the excesses already enumerated.

The possibilities, however, do not stop at this point. In order to carry out such a program of overexpansion the company almost invariably resorts to borrowing. This borrowing, in an industrial concern, is usually of a temporary sort, and when loans must be paid the company becomes financially "embarrassed." Temporary borrowings are used for reckless expansions. Even if borrowing has been of a more permanent nature, it may be found that the burden of interest payments is too great to be borne.

It is apparent, therefore, that an endless chain of difficulties is created, either as a result of overoptimism or as a result of plain ignorance of underlying business conditions. At any rate, a company which thus begins to be involved, immediately complains of the lack of working capital, and any failure which may result is by the wiseacres attributed to the "lack of capital." Yet it is doubtless true that almost no business failure has ever resulted *primarily* because of the "lack of capital." The apparently inadequate capital is merely an indication of the fact that the concern is attempting to do too much business on *credit,* and has failed to conserve its original capital or to limit its operations in a manner consistent with its own resources. In view of the careful attention which has been given to various phases of this problem in earlier connections, it scarcely seems necessary at this point to renew the discussion.

From an examination of Table 73 it appears that the number of business failures, and particularly the total liabilities of concerns which fail, increases very markedly immediately following the acute stage of industrial crises. At the beginning of periods of depression following general overexpansion difficulties and failures are multiplied. These failures in themselves are evidence of the cyclical movements in industry. The

TABLE 73

FAILURES, ASSETS, LIABILITIES AND NUMBER IN BUSINESS IN THE UNITED STATES YEARLY SINCE 1881 (BRADSTREET'S)

Year	No. Failures	Per Cent Increase or Decrease	Actual Assets, Millions	Total Liabilities, Millions	Per Cent Assets to Liabilities	Number in Business	Per Cent Failing
1928	20,370	+ 0.5	$278.4	$517.6	53.7	2,246,208	.90
1927	20,267	+ 1.2	385.0	653.1	58.9	2,255,429	.89
1926	20,024	+ 6.1	379.7	655.2	57.9	2,258,423	.88
1925	18,859	− 4.3	261.7	479.6	54.6	2,242,317	.84
1924	19,712	+ 2.8	$419.7	$694.8	60.4	2,195,626	.89
1923	19,159	− 14.5	369.1	631.2	58.2	2,136,921	.89
1922	22,415	+ 11.9	365.6	649.8	56.2	2,074,617	1.08
1921	20,014	+136.4	446.6	755.7	59.0	2,049,323	.97
1920	8,463	+ 53.4	274.1	426.3	64.3	1,958,042	.43
1919	5,515	− 40.8	55.3	115.5	47.9	1,843,066	.29
1918	9,331	− 28.3	69.3	137.9	50.9	1,824,104	.51
1917	13,029	− 21.0	84.8	166.6	50.9	1,828,464	.71
1916	16,496	− 13.3	86.1	175.2	49.1	1,790,776	.92
1915	19,035	+ 13.4	160.8	284.1	56.5	1,770,914	1.07
1914	16,769	+ 15.2	197.2	357.1	55.2	1,749,101	.95
1913	14,551	+ 5.3	159.0	292.3	54.3	1,718,345	.84
1912	13,812	+ 9.2	98.5	198.9	49.5	1,673,452	.82
1911	12,646	+ 9.2	102.0	188.1	54.2	1,637,650	.77
1910	11,573	− 2.3	94.2	188.7	49.8	1,592,509	.72
1909	11,845	− 15.6	69.3	140.7	49.2	1,543,444	.76
1908	14,044	+ 36.8	168.4	295.9	56.9	1,487,813	.94
1907	10,265	+ 9.3	287.9	383.7	75.0	1,447,680	.70
1906	9,385	− 5.9	63.1	127.2	50.0	1,401,085	.66
1905	9,967	− 4.3	65.0	121.8	53.3	1,352,947	.73
1904	10,417	+ 6.5	75.7	143.6	52.7	1,307,746	.79
1903	9,775	− 1.9	84.1	154.3	54.5	1,272,909	.76
1902	9,973	− 6.3	50.4	105.5	47.7	1,238,973	.80
1901	10,648	+ 7.4	61.1	130.1	46.9	1,201,862	.88
1900	9,912	+ 2.8	60.1	127.2	47.2	1,161,639	.85
1899	9,642	− 16.9	60.1	119.8	50.1	1,125,873	.85
1898	11,615	− 11.2	73.1	141.6	51.6	1,093,373	1.06
1897	13,083	− 13.3	86.5	158.7	54.5	1,086,056	1.20
1896	15,094	+ 16.4	147.8	246.9	59.9	1,079,070	1.40
1895	12,958	+ 1.8	87.6	158.7	55.2	1,053,633	1.23
1894	12,724	− 17.9	83.2	151.5	54.9	1,047,974	1.21
1893	15,508	+ 51.0	231.5	382.1	60.6	1,059,014	1.46
1892	10,270	− 17.1	54.7	108.6	50.3	1,035,564	.99
1891	12,394	+ 16.1	102.9	193.1	53.3	1,018,021	1.21
1890	10,673	− 9.0	92.7	175.0	52.9	989,420	1.07
1889	11,719	+ 10.7	70.5	140.7	50.0	978,000	1.20
1888	10,587	+ 9.7	61.9	120.2	52.0	955,000	1.10
1887	9,740	− 7.8	64.6	130.6	50.0	933,000	1.04
1886	10,568	− 4.9	55.8	113.6	49.0	920,000	1.15
1885	11,116	− 4.3	55.2	119.1	46.0	890,000	1.25
1884	11,620	+ 13.0	134.6	248.7	54.0	875,000	1.32
1883	10,299	+ 34.0	90.8	175.9	52.0	855,000	1.20
1882	7,635	+ 28.0	47.4	93.2	51.0	820,000	.93
1881	5,929	......	35.9	76.0	47.0	780,000	.76

unusual magnitude of failures in 1893, 1903, 1907-1908, 1914-1915, and 1921, as well as in 1926-1928, indicates that at certain times general business conditions are most unsound, but that those concerns whose management is inefficient are in grave danger of failing, even in prosperous times. However, the statement commonly and carelessly made that the failures are accounted for by "general business conditions" is largely incorrect. The fact is that *specific* business policies account for the *general* business condition.

BUSINESS FAILURES AND BUSINESS CYCLES

Some reference has already been made in Chapter I to the various interesting phenomena which characterize different periods in the business cycle. Only the briefest attention can here be given to those influences which interact and cumulate to precipitate an industrial crisis. As prices continue to increase during the period of prosperity, the operating costs of the business gradually catch up with the increased price received for the product. Fixed charges and the various supplementary costs also begin to climb. The "lag" in wages begins to be less noticeable, while labor efficiency gradually decreases as wages and other costs increase. The general efficiency of capital diminishes, and management as a result of overexpansion and divided interest becomes less effective. In the meantime the average business in order to keep up with its competitors continues expanding and borrowing more heavily from the banks, or later through note issues. This procedure for a time seems to lead to greater profits, and, while bank reserves are high, bankers frequently encourage such business expansion. After a time, however, interest rates also increase rapidly. Finally, a point is reached when the demand for goods is not sufficient readily to absorb the amount being produced at a price which will enable the more recklessly expanded or less efficient concerns to make a profit. Financial difficulties then arise which are frequently made more serious as the result of rumors readily circulated at such times. Then failures begin to be more numerous, and the general unsoundness in the financial situation becomes obvious. These phenomena periodically recur, and the financial embarrassments are frequently intensified because of the influence of wars or because of unfavorable political developments. Underlying all, however, is the ever present tendency to "overexpansion" of some sort. The following quotation from Mitchell very aptly sums up the situation.[1]

> "The expectation of large profits, complicated with the prevalence of an optimistic bias in judging business

[1] Mitchell, *Business Cycles*, page 489.

chances, disposes men of affairs to undertake as much business as possible upon their working capitals. Indeed, not a few venture beyond the line of safety, and failures ascribed to inadequacy of capital become numerous. Of course, this effort to make one's own capital support as much business as possible involves borrowing a larger proportion of the funds required than is common in periods of depression or revival. That is to say, the demand for bank loans increases even more rapidly than the pecuniary volume of business."

Obviously, as the business cycle revolves, different types of industries will find themselves financially involved in varying degrees. Some concerns are of such a stable sort that they are not particularly subject to cyclical fluctuations. Others are very sensitive to changes in the general business conditions. As a rule it is probable that there is a greater liability to financial embarrassment in the case of those companies which deal in raw materials or semi-finished goods which are used in further production. Their prices frequently drop precipitately while the prices of finished goods may be little affected. Likewise those concerns whose market is narrow, either because of the small number of customers served or because of geographical specialization in trade, will be subject to particular risks. Companies dealing in luxuries will also be peculiarly subject to embarrassment.

Finally, failures will probably be most numerous, relatively, among the smaller concerns for a number of reasons. Their management will, no doubt, be less competent, and their failure following financial embarrassment will not entail the serious consequences which might result from the failure of larger business units. Creditors, therefore, will probably make much less effort to save the smaller company which is in financial difficulties. The high percentage of failures among trading concerns is no doubt accounted for by their extremely incompetent management, resulting from the ease with which anyone can enter the business. Were it not for this fact, they should be a particularly favored class at such times since their

capital risks are relatively small, and there is ordinarily a more certain demand for their goods than for the product of many manufacturing enterprises.

One or two significant facts stand out prominently in Table 74. The actual percentage of business failures in which a capital in excess of $100,000 was employed is very low indeed, amounting to only one-tenth of one per cent of all failures

TABLE 74

FAILURES IN THE UNITED STATES AND CANADA CLASSIFIED ACCORDING TO CREDIT RATINGS, TO LIABILITIES, AND TO CAPITAL EMPLOYED

(*Bradstreet's*)

	1928		1927		1926		1925	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Credit Ratings of those who failed.								
Total number failures United States and Canada	22,246	100.	22,283	100.	22,130	100.	20,973	100.
Number failing which had Very Moderate or No Credit	21,389	96.1	21,401	96.	21,312	96.3	20,260	96.6
Number failing rated in Good Credit	772	3.5	816	3.7	751	3.3	659	3.1
Number failing rated in Very Good Credit or Higher	85	.4	66	.3	67	.3	54	.3
Liabilities of those who failed.								
Total number failures United States and Canada	22,246	100.	22,283	100.	22,130	100.	20,973	100.
Total with less than $5,000 liabilities	9,007	40.5	8,979	40.3	9,422	42.6	8,525	40.6
Total with $5,000 liabilities and over	13,239	59.5	13,304	59.7	12,708	57.4	12,448	59.4
Total with $5,000 to $20,000 liabilities	8,938	40.2	8,756	39.3	8,285	37.4	8,538	40.7
Total with $20,000 to $50,000 liabilities	2,601	11.7	2,720	12.2	2,471	11.2	2,309	11.
Total with $50,000 to $100,000 liabilities	865	3.9	873	3.9	899	4.	809	3.9
Total with $100,000 to $500,000 liabilities	717	3.2	805	3.6	945	4.3	698	3.3
Total with $500,000 liabilities and over	77	.3	150	.7	108	.5	94	.5
Total with $1,000,000 liabilities and over	41	.2	72	.3	59	.2	36	.2
Capital employed by those who failed.								
Total number failures United States and Canada	22,246	100.	22,283	100.	22,130	100.	20,973	100.
Total with $5,000 capital or less	20,175	90.7	20,471	91.9	20,464	92.5	19,213	91.6
Total with over $5,000 and less than $20,000	1,493	6.7	1,310	5.9	1,226	5.6	1,247	6.
Total with $20,000 and less than $50,000	422	1.9	350	1.6	297	1.3	378	1.8
Total with $50,000 and less than $100,000	122	.6	100	.4	87	.4	85	.4
Total with $100,000 and less than $500,000	33	.1	49	.2	49	.2	47	.2
Total with $500,000 and over	1	......	3	.01	6	.03	3	.01
Total with $1,000,000 and over	......	......	1	......	......	......	2	.01

during the year 1928. On the other hand, the liabilities of this same group of concerns amounted to 3.7 per cent of the total liabilities. This ratio is 37 times as high as the ratio of capital employed. Even in 1921 only 108 failures with a capital in excess of $100,000 were reported, while 1,232 companies report liabilities in excess of this amount. Apparently, therefore,

TABLE 75

Failures by Branches of Business—Five Years

(*Dun's*)

MANUFACTURERS	NUMBER				
	1927	1926	1925	1924	1923
Iron, Foundries and Nails	120	80	57	60	79
Machinery and Tools	254	312	412	471	495
Woolens, Carpets & Knit Goods	36	48	70	63	42
Cottons, Lace and Hosiery	20	21	10	16	49
Lumber, Carpenters and Coopers	850	644	466	378	453
Clothing and Millinery	494	585	624	673	645
Hats, Gloves and Furs	153	121	85	142	161
Chemicals and Drugs	64	61	78	78	72
Paints and Oils	11	17	23	16	13
Printing and Engraving	264	230	198	191	165
Milling and Bakers	461	500	518	449	485
Leather, Shoes and Harness	140	133	163	200	205
Tobacco, etc.	104	89	89	108	110
Glass, Earthenware and Brick	91	65	65	92	73
All Other	2,620	2,489	2,232	2,271	1,921
Total Manufacturing	5,682	5,395	5,090	5,208	4,968
TRADERS					
General Stores	1,214	1,217	1,305	1,452	1,512
Groceries, Meat and Fish	3,543	3,633	3,355	3,067	2,882
Hotels and Restaurants	1,046	928	1,072	843	739
Tobacco, etc.	232	277	328	320	302
Clothing and Furnishings	2,157	2,058	2,118	2,072	1,561
Dry Goods and Carpets	1,187	1,021	1,035	959	874
Shoes, Rubbers and Trunks	729	597	732	731	667
Furniture and Crockery	686	606	631	559	384
Hardware, Stoves and Tools	465	430	413	379	412
Chemicals and Drugs	714	632	495	528	490
Paints and Oils	85	83	72	57	69
Jewelry and Clocks	420	406	445	355	294
Books and Papers	142	121	112	96	116
Hats, Furs and Gloves	92	91	114	114	88
All Other	3,370	3,168	2,934	2,861	2,674
Total Trading	16,082	15,268	15,161	14,393	13,064
Agents, Brokers, etc.	1,382	1,110	963	1,014	686
Total Commercial	23,146	21,773	21,214	20,615	18,718

[NOTE.—Iron, Woolens and Cottons include all the branches of those manufactures; Machinery includes vehicles, shipbuilding, hardware, fixtures and implements; Lumber includes saw, planing sash and door mills and furniture; Clothing includes tailors, men's and women's clothing, also furnishings; Chemicals include chemical fertilizers; Printing includes books and maps; Leather and s' oes nclude saddlery and trunks; Glass includes pottery, lime, cement, quarry and stone; Groceries include

the financial position of the larger concerns grows very bad indeed before they are actually allowed to fail. The reverse situation is found in the case of the group of very small concerns employing a capital of $5,000 or less. During 1928, 20,175 of this class were reported, of which 9,007, or 40.5 per cent. had liabilities under $5,000.

It must not be supposed that the twenty-odd thousand "failures" listed in the accompanying tables really measure the

TABLE 75 (*Continued*)

FAILURES BY BRANCHES OF BUSINESS—FIVE YEARS (*Continued*)

(*Dun's*)

LIABILITIES				
1927	1926	1925	1924	1923
$ 18,125,588	$ 5,895,850	$ 2,208,514	$ 7,863,813	$ 7,445,738
12,952,562	19,949,437	18,319,309	50,322,744	50,623,510
1,537,259	3,193,381	4,865,828	4,883,074	3,170,789
4,815,599	5,145,130	784,308	2,188,684	12,014,739
43,985,781	21,218,334	20,833,758	11,567,462	15,256,611
12,551,062	11,439,747	10,771,537	15,285,847	12,357,684
2,490,608	2,278,295	1,963,628	7,653,363	3,836,595
3,711,555	1,428,556	3,410,512	42,119,313	7,462,930
261,600	536,998	309,300	331,000	776,518
7,613,046	3,490,448	3,910,495	3,621,178	15,651,959
5,011,852	5,031,439	4,529,375	5,510,279	5,693,855
7,870,414	4,028,546	5,020,555	4,390,296	6,979,675
4,287,730	3,912,000	4,335,699	3,524,240	5,006,602
8,400,187	2,118,880	4,839,939	5,524,604	4,175,778
77,889,983	68,374,975	81,582,082	121,984,363	130,863,222
$211,504,826	$158,042,016	$167,684,839	$286,770,260	$281,316,205
$ 18,739,646	$ 17,396,419	$ 20,007,586	$ 16,927,255	$ 24,119,655
29,307,253	29,636,914	29,756,843	26,783,067	25,935,596
18,241,755	13,869,246	12,494,224	10,510,282	12,473,029
1,704,078	2,472,792	2,883,943	2,348,269	2,841,432
28,523,815	24,708,183	33,151,013	27,204,803	28,513,160
22,090,483	19,405,331	21,615,922	27,032,155	17,806,063
8,683,442	6,452,607	8,221,067	11,064,687	9,463,588
11,593,429	11,774,322	10,743,808	8,295,329	12,578,432
7,558,772	7,250,709	8,437,865	6,808,863	9,594,749
7,607,591	6,335,024	5,077,618	5,116,990	7,231,285
932,229	958,407	927,542	643,501	635,620
7,591,560	7,168,102	8,357,103	5,858,793	4,706,046
2,660,587	2,431,569	1,418,433	1,041,919	1,223,242
1,592,318	1,030,638	1,710,921	1,850,415	1,642,010
61,367,463	50,443,710	50,564,682	51,703,787	51,166,365
$228,194,421	$201,333,973	$215,368,517	$203,190,115	$209,930,272
80,405,021	49,856,289	60,690,863	53,265,074	48,140,329
$520,104,268	$409,232,278	$443,744,272	$543,225,449	$539,386,806

creamery, teas and coffees; Hotels include lodging houses and caterers; Dry Goods include department stores, curtains and draperies; Furniture includes glass and glassware; Hardware includes implements and utensils; and Jewelry includes watches and optical goods. Brokers include agents, commission men, real estate agents, insurance, storage, express, harbor lines, etc.] *Dun's Review*, January 14, 1928.

amount of financial loss and ineffectiveness to which industrial enterprises are subject. These figures refer only to the cases which have become publicly known, usually through the bankruptcy courts, and in which creditors have suffered actual losses. The number of business enterprises operating over considerable periods of time at an actual deficit or operating merely with a very small degree of profit—too small to justify the economic existence of the business—is many times as great as the reported number of failures.

TABLE 76

Corporations Reporting no Net Income, 1925
(*Value Unit: $1,000*)

Industrial Groups	Number	Per Cent of Total Corporations Reporting	Gross Income: Amount	Gross Income: Average Per Corporation Reporting Deficit	Gross Income: Average Per Corporation Reporting Profit[1]	Deductions	Deficit: Amount	Deficit: Average Per Corporation Reporting	Deficit: Per Cent of Gross Income	Deficit: Per Cent Distribution
Agricultural and related industries	5,242	52 9	$ 221,340	$ 42	$124	$ 280,554	$ 59,215	$11	26.7	3.0
Mining and quarrying	13,675	71 4	1,213,439	89	678	1 423,396	209,957	15	17.3	10.6
Manufacturing:										
Food products, beverages, and tobacco	5,419	36.8	$ 1,923,747	$355	$1,234	$ 2,015,259	$ 91,512	$17	4.7	4.7
Textiles and textile products, other than clothing	2,120	38.7	1,110,026	522	1,143	1,191,255	81,229	38	7.3	4.1
Clothing	2,647	39.0	498,376	188	549	531,920	33,544	13	6.7	1.7
Total textiles and textile products	4,767	38.9	1,608,402	336	814	1,723,175	114,772	24	7.1	5.8
Leather and leather products	986	41.8	339,191	344	855	368,086	28,895	29	8.5	1.5
Rubber and rubber goods	289	45.3	95,862	331	3,936	109,803	13,941	48	14.6	0.7
Lumber and wood products	2,976	39 0	587,054	194	511	640,170	53,116	18	9.1	2.7
Paper, pulp, and products	652	33 6	230,547	351	979	242,684	12,137	19	5.3	0.6
Printing and publishing	3,397	34.2	293,786	86	321	323,290	29,505	9	10.1	1.5
Chemicals and allied substances	3,011	43.3	590,301	196	1,639	672,653	82,352	27	13.9	4.2
Stone, clay, and glass products	1,701	38.2	156,780	92	489	174,626	17,846	10	12.4	0.9
Metal and metal products	8,769	40.7	1,774,904	201	1,359	1,976,348	201,445	23	11.4	10.2
All other manufacturing	2,570	41 2	304,215	118	546	340,948	36,733	14	12.0	1.9
Total Manufacturing	34,537	39.0	$ 7,904,788	$229	$976	$ 8,587,042	$ 582,255	$17	8.6	34.8
Construction	5,637	36.8	$ 391,555	$ 69	$197	$ 434,901	$ 43,346	$ 8	11.1	2.2
Transportation and other public utilities	8,751	37.1	928,339	106	738	1,063,084	134,745	15	14.5	6.9
Trade	37,678	34.4	7,229,906	191	454	7,517,412	287,506	8	4.0	14.6
Public service — professional, amusements, hotels, etc.	12,410	42.8	556,185	45	138	628,411	72,226	6	13.0	3.7
Finance—banking, insurance, related business, etc.	42,701	36.8	3,944,577	92	116	4,440,796	456,219	11	11.6	23.2
All other concerns	3,563	67.0	108,934	31	121	124,138	15,204	4	14.0	0.8
Nominal concerns (inactive and nature of business not given)	13,544	100.0	....	......	......	1,956	1,956	0 1	......	0.1
Grand Total	177,738	41.3	$22,499,062	$127	$449	$24,461,691	$1,962,628	$11	8.7	100.0

[1]See Table 6, page 30.

Some light is thrown on this phase of the problem by the adjoining table, based on data collected by the Commissioner of Internal Revenue. In 1926, 43.3 per cent of all business corporations in the United States were operated at a deficit, or at any rate reported no net income. The deficit reported by these 197,186 companies amounted to $2,168,710,302, or 9 per cent of their gross income during a prosperous year, and was equal to 22.5 per cent of the net income of *all* corporations reporting a profit (258,134). In 1921, 185,158 corporations, or 52 per cent of all reporting, returned a deficit of nearly $4,000,000,000, or 12.5 per cent of their gross income, and more than 41 per cent of all net income! Ever since 1919, more than 40 per cent of all corporations have reported no net income, and a far greater number of unincorporated enterprises are also financially ineffective.

METHOD OF AVERTING THREATENED FAILURE

For our purposes it scarcely seems necessary to attempt a technical definition of the term "business failure." From the strictly legal point of view, as defined in the bankruptcy law, a concern is not insolvent unless the aggregate of its property is insufficient at a fair valuation to pay its debts. Obviously, however, many a business is *actually* insolvent long before this point is reached. Though its assets may be far in excess of all outstanding obligations, it is quite possible that a business may not have at a specific time sufficient money to meet current payments for wages, interest, and the like. Also it may be wholly unable immediately to convert assets into cash in order to pay its open accounts or bank loans which have fallen due. Under such circumstances a business, though not yet actually "bankrupt," is virtually insolvent, and is rapidly approaching liquidation unless some steps are taken to enable it to pay its bills or to postpone such payment. It is, therefore, necessary to decide what concerns are worth saving from further financial embarrassment and how the difficulty can best be solved. Each case must be handled upon its individual merits in the light of its past history and present problem.

If a company's management is honest and its financial difficulties appear to be the result of only temporary causes, an "extension" may frequently be granted by mercantile or even by bank creditors. Thus sufficient time may be given to enable the concern to regain a solvent position before payment of obligations is demanded. Such *friendly adjustments* are taking place every day, and in this manner a business is frequently saved from otherwise certain failure.

As the business grows larger, however, and the scope of its operations is correspondingly increased, it may become necessary for creditors to assume a more positive attitude in the matter. They may feel that the debtor cannot be fully depended upon to work his own way out of the difficulty, even though they may have decided that it is for their own interests not to force payment through the usual legal channels. Under such circumstances *creditors' committees* are formed, consisting of those creditors whose claims are largest. In order to avoid interference, they frequently pay off the smaller creditors, and then attempt to aid in the direction of the insolvent's business in such manner as to enable him ultimately to meet his obligations. There are infinite variations of this method of meeting financial difficulties, sometimes referred to as a "rescue party" method, and not infrequently legal expenses are saved and threatened bankruptcy is averted by timely intervention of this sort. During the recent critical period the commercial banks have been particularly active in using this method to help their clients and themselves through embarrassing situations.

Banks or mercantile creditors may agree not merely to postpone the payment of their claims, but also to increase their lines of credit to an embarrassed customer, provided they are convinced that by so doing a failure may be averted. During the past two years, as everyone knows, there have been countless instances of this sort. In some cases the granting of additional credit in this manner has been successful, while in other cases the results have proved disastrous. At such times the bank must exercise much judgment in determining what concern shall be saved.

THE PURPOSE AND PROCEDURE OF REORGANIZATIONS

When the financial affairs of a fair-sized company are seriously involved, though the concern is not actually bankrupt, it is common to provide for a *reorganization* or *readjustment* of the capital liabilities, primarily with a view to protecting the interests of creditors.

Reorganizations, of course, sometimes take place when there has been no financial difficulty. Under such circumstances it may seem desirable, for example, (*a*) to recapitalize, (*b*) to change the form of ownership, or to make possible a broader distribution of the ownership through the issue of a larger number of shares, (*c*) to change the place of incorporation or (*d*) even to dispose of a portion of the company's property. Such reorganizations are of a wholly voluntary sort and need not concern us in this connection.

The typical reorganization is *involuntary,* and in practically all cases results from either mismanagement or misfortune. However, practically all the difficulties which have been attributed to "misfortune" may, upon careful analysis, be accounted for by incompetent management at some stage in the history of the business. Even the difficulties alleged to arise from "over-competition," or change in demand, are fundamentally due to incompetency. A concern whose existence is economically justified can usually avoid such difficulties.

A reorganization may be either *private* or *judicial.* In the latter case the matter is handled by the courts, and much publicity is given to a company's affairs. Whenever possible, therefore, it is desirable to avoid public reorganizations. Whatever method of reorganization is followed, its purpose is primarily to make immediate ownership and creditor adjustments which will render it possible to avoid technical insolvency and to raise the funds needed in order to meet pressing obligations. The further aim of reorganizations is, of course, if possible to remove the *causes* which have lead to the present difficulty. This frequently means that there must be a reconstruction of the capital account in such a manner as to reduce fixed charges for interest payments and sometimes "con-

tingent" charges in the form of preferred stock dividends. Finally, depending upon the nature of the causes which have lead to financial embarrassment, it may be necessary to install a new management.

It is necessary, therefore, first of all to reconcile a number of conflicting interests whose claims will in each instance vary in urgency and importance. There will normally be an indefinite number of mercantile creditors whose claims vary widely in amount, as well as one or more bank creditors. These two groups are usually unsecured creditors whose claims will be "junior" to those of debenture note holders or bond holders, whose interest or principal has not been paid. There may also, depending upon the nature of the capitalization of the company, be a group of preferred stockholders whose dividends are in arrears or whose position has been weakened through the failure of the company to abide by the protective restrictions provided in their covenant. Simple reorganizations have frequently been necessary because of a company's failure to comply with the technical requirements imposed by a bond indenture, such as the stipulation that the net current assets must be kept at a certain percentage of the funded obligations outstanding.

Whatever the situation may be, the various conflicting interests will probably wish to be represented through "protective" committees, and naturally the stockholders, who are the owners of the business, will wish to have their equities conserved. Upon the latter, however, will properly fall the chief burden of the reorganization, since the risks of the business have been assumed by them, and the company's abuse of credit through their representatives probably led to its present difficulties.

The adjustments which in practise are made through reorganization proceedings are innumerable.

1. One of the favorite methods is to assess the stockholders by an amount sufficient to enable present obligations to be met. As most common stock is now issued as "fully paid and non-assessable," the assessment usually takes the form of offering new securities to the original stockholders. Whether or not a stockholder is justified in permitting himself to be assessed will depend largely upon the causes leading to the reorganization.

If the past record of the company has been good, and the financial embarrassment appears to be due largely to temporary causes, it will probably be advantageous for the present owners to furnish through an assessment the needed additional capital. Stockholders who do not wish to participate in this manner can withdraw from ownership, provided there is a market for the stock, or they may be "frozen out" by the majority stockholders, who adopt some new plan of capitalization which greatly reduces or perhaps actually destroys the value of the old shares.

2. Very frequently the readjustment may lead to a substitution of a "junior" form of security for a "senior" obligation. For example, noteholders may be persuaded to take a certain portion of their claims in preferred stock. Preferred stockholders may agree to accept common stock or preferred stock carrying a lower dividend rate in a new concern organized to take over the assets of the old business.

An interesting recent case is afforded by the Cuba Cane Sugar Company in which a large proportion of the holders of the 7 per cent debenture bonds agreed to give up the "senior position" guaranteed them by the indenture, in return for an increase of the interest on their holdings from 7 per cent to 8 per cent. This made it possible for the company to negotiate an additional loan of $10,000,000 which was sufficient to tide over a serious financial embarrassment which would otherwise almost inevitably have plunged the company into bankruptcy

3. Floating debts may be funded, and short time obligations which are now pressing for payment may be exchanged for long time obligations. Unpaid interest or accumulated preferred dividends may be paid in notes or stock in order to relieve the company's treasury.

One of the most interesting readjustments of this sort was made in the recapitalization of the Goodyear Tire and Rubber Company. Necessary working capital was raised through the issue of $30,000,000 of 20-year, first mortgage, 8 per cent sinking fund bonds; 10-year, 8 per cent debenture bonds to the extent of $27,500,000 were issued for the purpose of settling the company's bank debts, either through direct exchange with

the banks or by public sale; while more than $30,000,000 of prior preference stock was issued to pay the company's mercantile creditors. After the various protective provisions surrounding these three senior issues, the ordinary preferred and common stock offered in exchange for the original preferred and common stock has merely a nominal value. Practically no equity remained for the former owners of the company.

A few years ago (1922) an interesting plan for the reorganization of the United States Worsted Company was developed. In accordance with this plan a new company of a different name was to be formed, and all creditors were to receive for every $1,000 of indebtedness, $500 in cash, $250 in new 15-year, 6 per cent debentures, 1¼ shares of non-cumulative, 6 per cent preferred stock, and 1¼ shares of common stock. Also it was proposed to assess the first preferred stock of the old company $20, and the common stockholders $1.50. In each case an equivalent amount of preferred stock in the new company was offered in exchange for this assessment, and in addition a bonus in common stock was to be given.[1]

4. A practise recently followed in a number of important reorganizations provides for the *donation* of a certain percentage of the outstanding common stock. The donated stock may then be resold by the company, or may be canceled. In the former case a direct sacrifice will have been made by the owners and the scheme would scarcely prove possible except in a closely owned corporation such as some of the typical New England cotton mills. In the latter case the cancellation of stock does not in any way change the equities of the owners. They merely have their ownership divided into a smaller number of shares. By this adjustment, however, a balance sheet deficit may be changed into a surplus so that the company may apparently be in a much stronger position for further public financing. Several years ago it was proposed to recapitalize the Libby, McNeill and Libby Company by decreasing the amount of capital stock from 2,700,000 shares (par $10) to 675,000

[1] During 1922 the Mississippi River Power Company paid off the preferred dividends which had accumulated for more than six years by issuing to the stockholders an equivalent amount of preferred stock. This was done by capitalizing a portion of the company's surplus.

shares of common, and to create a preferred stock issue of 250,000 shares which would be sold in order to raise working capital.

5. As has already been intimated, a new company may be organized in order to facilitate the capital readjustments which must be made. The newly organized company may take over the entire business of the old company or may absorb only the more profitable part of the business. In post-war years many companies were formed in order to save a portion of the assets of the original company. From the financial and legal point of view such a readjustment may be extremely helpful, inasmuch as the newly organized concern can operate with greater freedom and may use its profits to conserve the assets of the parent company.

Sometimes, however, the formation of a new company is merely a subterfuge resorted to in order to avoid the payment of present obligations. Occasionally, also, a new company will thus be formed with a view to furnishing a new type of security which may be used as collateral for the further borrowing of the parent company. The writer recalls a well-known corporation which for many years has been periodically embarrassed because of its attempts to do too large a business for its amount of capital. Almost invariably it has dug itself out of immediate difficulties by organizing some new subsidiary company almost solely owned by the parent company, and then selling or pledging the securities of the subsidiary company in order to raise additional temporary capital.

Without further discussion of the various methods of reorganization and readjustment, the situation may be summed up by saying that the various methods followed can really be reduced to two. Either (*1*) money will be raised from *new* sources in order to meet present obligations, or (*2*) the present owners and creditors will be required to furnish the additional capital in some manner, in lieu of which they must be content (*a*) to "scale down" their claims, (*b*) to take some kind of securities in place of their unsecured claims, or (*c*) to exchange their senior securities for junior securities. In gen-

eral, most financial aid will be obtained by appealing to these who have *most* to *lose* if the company should liquidate its assets, or *most* to *gain* through its continued operation.

RECEIVERSHIP PROCEEDINGS

If the affairs of a concern have become so involved that a judicial reorganization must be effected, the courts may appoint a "receiver" for the property upon due request from secured or unsecured creditors, or perhaps upon the request of the company itself or of its stockholders. A wholly impartial but presumably competent person may be appointed by the equity court as the receiver, or a "friendly" receivership may be created. In the latter case a close friend of the management or perhaps even an officer of the company may be appointed as receiver. Also, when a concern is in bankruptcy a receiver is customarily appointed, though in such a case the receivership is *involuntary*. At all events the function of the receiver is to administer the affairs of the insolvent concern in such a manner that the assets will be conserved for the benefit of the creditors, so that the property may be turned back to the owners in a sounder condition at the expiration of the receivership, or may be equitably distributed to the various creditor interests, provided the dissolution of the business is inevitable or desirable.

A receiver is given very extensive powers by the courts in the administration of his duties. During a receivership, payments to creditors will be postponed, and thus funds may be obtained to enable the business to be carried on. However, working capital is more commonly raised by the issue of receiver's certificates which take precedence of all unsecured debts of the company, and which may be prior even to all bond issues if the receiver has been appointed on the petition of, and for the benefit of, the holders of senior securities. The general expenses of the receiver and the cost of administering the property under receivership are also regarded by the courts as prior claims. The receiver is thus enabled to manage the affairs of an embarrassed company with little interference and

comparatively little restraint. The normal outcome of a receivership will be (*a*) a readjustment and continuance under the same corporate name, (*b*) a reorganization and sale to a new company, or (*c*) perhaps a gradual liquidation of the business.

In this connection it may be noted that a method of private readjustment sometimes followed, particularly in the case of smaller companies, is to offer a *composition* to creditors. This usually means that the business is to all intents and purposes insolvent, and will probably be unable for a long period of time, if at all, to pay 100 cents on the dollar to its creditors. "Composition" settlements are most frequently made to mercantile creditors by trading concerns, and would not ordinarily be agreed to by a bank. No such settlement is legally binding unless all creditors agree to accept a certain percentage payment of their claims as full and final compensation. Provided the management of the company has been honest, it is frequently wise for creditors to be content with an adjustment of this sort rather than to force the debtor into bankruptcy. In bankruptcy proceedings much time is consumed, assets are frequently wasted, and the expenses of administration mount to such a point that only a relatively small dividend can ordinarily be paid to creditors.

BANKRUPTCY

Bankruptcy is the last resort of a financially embarrassed business concern. It rarely happens that a company which has gone through the bankruptcy courts is ever revived. Credit thus injured cannot ordinarily be restored, for as a rule creditors receive only a very small percentage of their claims when the business of the debtor is liquidated. Therefore, if there is any reasonable possibility that a business can ultimately regain a solvent position, it is usually unwise for creditors to force it into bankruptcy. Nor will an honest company become voluntarily bankrupt except under the most extreme circumstances.

There are instances when it is doubtless desirable for a business to be liquidated. (*a*) This may be true when the com-

pany has been ineffective from its inception, due largely to the fact that its launching was not economically justified. (*b*) It may be impossible under certain circumstances to provide a satisfactory management for the continued operation of the business. This may sometimes happen when a narrowly owned business becomes financially embarrassed due to the death of the chief owner and manager who has left no one to take his place. (*c*) Sometimes, though infrequently, the disasters arising through the influence of external conditions, which lead to a permanent curtailment of the scale of operations, or perhaps cause an actual cessation of activity, may be sufficient to make it absolutely necessary to liquidate the business.

In most cases, however, the reason first given plays the major part in leading to the company's legal dissolution. Of course, in a far larger number of instances small concerns may cease to operate without going through any legal formalities whatever. They may merely voluntarily dissolve and divide their assets among their creditors, provided the latter are willing to have the matter handled in this manner.

THE BANKRUPTCY ACT

At this point brief attention may properly be called to the more important general provisions of the National Bankruptcy Act, which was passed in 1898 and has been subsequently amended. Before the passage of the act, each state dealt with bankrupts according to its own pleasure, with resultant lack of uniformity and grave injustice. The purpose of this law is to protect both debtors and creditors. The former need to be protected against the claims of unscrupulous creditors. Creditors, in turn, must be assured of fair and equitable treatment in the distribution of the debtor's assets. *Insolvency,* according to the bankruptcy law, exists when the aggregate of the debtor's property, exclusive of any property which he may have conveyed, transferred, concealed or removed in the attempt to defraud, hinder or delay his creditors, shall not, at a fair valuation, be sufficient to pay his debts. Such insolvents may become voluntary or involuntary bankrupts.

Voluntary bankruptcy is based upon a written admission of inability to pay one's debts and willingness to be adjudged a bankrupt on such grounds. Any person, partnership, or corporation except a municipality, railroad, insurance, or banking corporation may become voluntarily bankrupt. Because of the peculiar relations which corporations of this type bear to the public, it is not deemed expedient to permit them to become either voluntarily or involuntarily bankrupt.

Any person, except wage earners who receive compensations not exceeding $1,500 annually or persons engaged chiefly in farming or tilling of the soil, any unincorporated company, or any business or commercial corporation except municipal, railroad, insurance, and bank corporations, may be forced into involuntary bankruptcy, provided debts are owed and cannot be paid to the amount of at least $1,000. A petition in involuntary bankruptcy, however, may be filed by three or more creditors whose provable claims aggregate at least $500, provided the total number of creditors is twelve or more.[1] If the creditors are fewer than twelve in number, excluding employees and relatives, one creditor whose claim amounts to $500 or more may file a petition. Further, to be declared an involuntary bankrupt the debtor must have committed one of the so-called "acts of bankruptcy" within four months of the date of filing the petition by his creditors. These acts of bankruptcy are now six in number and are briefly summarized as follows:

1. The fraudulent conveyance, transfer, concealment, or removal of property with an intent to hinder, delay or defraud creditors.

2. Permitting a lien to be created on property while party is

[1] One of the disadvantages of the federal bankruptcy law is the fact that petitioners with such small claims can throw a large corporation into bankruptcy. It is usually the small creditors who become restless, and for their own ends start bankruptcy proceedings. Obviously, therefore, a large corporation will be well advised to keep its small bills promptly paid. Not long ago the United States Food Products Corporation, with outstanding capital stock having a par value of $30,774,181, was petitioned into bankruptcy by three concerns whose claims aggregated only $734. About a year earlier the report of this corporation listed the total assets at $53,312,487, while the aggregate debts both funded and current, were reported to be less than $16,000,000!

insolvent, unless such lien is discharged or vacated within 30 days.

3. The giving preferences by the debtor to special creditors. This happens when a debtor, while insolvent, transfers any portion of his property to one or more of his creditors with the intent to prefer such creditors over others.

4. The giving of preferences through legal proceedings is also an act of bankruptcy. Thus a debtor, while insolvent may permit a favored creditor to obtain a lien upon property through legal proceedings to the detriment of other creditors.

5. The making of an "assignment" for the benefit of creditors may also be an act of bankruptcy, provided an assignment was made or application for a receiver was filed when the debtor was actually insolvent according to the definition of the law. Under such circumstances the intent may be to deprive the bankruptcy court of jurisdiction over the estate.

6. The most common act of bankruptcy is the admission in writing of inability to pay one's debts and willingness to be adjudged a bankrupt on these grounds.

As a result of bankruptcy proceedings a "composition" may be offered or the property may be sold and the assets distributed for the benefit of creditors. A composition in bankruptcy means that if a majority of the creditors controlling more than half of the total indebtedness agree, an offer may be made by the debtor to settle their claims at a certain number of cents on the dollar. The terms of the offer may be confirmed by the court, provided the composition appears to be for the best interests of all parties. Having been confirmed by the court, the offer becomes binding on every creditor whether or not he has given his assent to the plan. If a "composition" is not effected in this manner, the court must proceed to administer the affairs of the bankrupt until such time as declaration and payment of dividends can be made. Unsecured creditors will share pro rata in the net assets available for distribution after prior claims have been met.

Some highly interesting relations are suggested by the figures

presented in Table 77, which shows the administration of bankruptcy cases in the United States during the fiscal year ending July 1, 1927, as reported by the Attorney General. It must be understood that these figures bear no relation whatever to the number of "failures" reported in preceding tables. The latter supposedly cover all cases where financial embarrassments have resulted in loss to creditors, even though they have never reached the bankruptcy courts and in most cases will not even have passed through judicial reorganizations. Apparently, voluntary bankruptcies are much more common than involuntary bankruptcies for all classes except manufacturing concerns. It is further apparent that by the time bankruptcy proceedings are actually inaugurated, the failures have grown very grave indeed.

An analysis of the totals presented in this tabulation reveals some highly significant facts. In the first place, only 12.7 per cent of the total liabilities, or $112,455,547 was realized in the bankruptcy proceedings. Of this amount, however, almost one-seventh was disbursed in the conduct of the business pending distribution of assets. There remained, therefore, only $96,558,929, or only 10.9 per cent of the total liabilities ($885,557,335). It must not be supposed, however, that the creditors received this entire amount. On the contrary, the total fees and expenses of administration amounted to $21,342,066, or 22.1 per cent of the net assets realized. Other deductions for exemptions[1] having been allowed, the secured and unsecured creditors received only $72,094,000 or 8.4 per cent of their aggregate claims. In final analysis, therefore, it is found that only about 75 per cent of the net assets realized was finally distributed to the creditors, or only 64 per cent of the actual amount realized in the bankruptcy proceedings. Bankruptcy is not only an uncertain and expensive method of dealing with financial embarrassments, but also a slow and tedious one, as

[1] Practically every state has passed laws providing that the debtor shall be allowed a certain exemption whereby he may retain some proportion of his property before creditors' claims are met. In some instances these exemptions are very liberal indeed, though they usually apply to individuals and not to corporations. The national bankruptcy law recognizes all state "exemption" laws in effect at the time of the filing of the petition in bankruptcy.

TABLE 77

Statistics of Bankruptcy for the Fiscal Year 1927[1]

	Voluntary	Involuntary	Total
Summary for the United States			
A. Cases pending, concluded, etc.:			
1. Pending at close of previous year[1]	40,811	18,132	58,943
2. Filed during year	43,070	5,688	48,758
3. Concluded during year, including petitions dismissed and compositions confirmed	42,295	5,974	48,269
4. Pending close of year	41,586	17,846	59,432
5. Petitions dismissed	720	480	1,200
6. Compositions confirmed	253	439	692
Nature of business of bankrupt in cases concluded (including petitions dismissed and compositions confirmed):			
7. Farmer	6,297	17	6,314
8. Wage earner	18,494	74	18,568
9. Merchant	8,441	3,700	12,141
10. Manufacturer	721	678	1,399
11. Professional	1,167	54	1,221
12. Other classes	7,175	1,451	8,626
13. Total	42,295	5,974	48,269
B. Liabilities:			
1. Represented by priority, secured, and lien claims	$159,347,654	$53,711,597	$213,059,251
2. Represented by unsecured claims which have been proved and allowed	151,842,155	253,268,869	405,111,025
3. Represented by unsecured claims, as shown by schedules, which have not been proved	217,395,422	49,991,635	267,387,058
4. Total	$528,585,232	$356,972,102	$885,557,335
C. Amounts realized:			
1. Total amount realized or received by marshals, receivers, trustees, and referees	$38,079,647	$74,375,900	$112,455,547
2. Total amount disbursed in conduct of business	2,362,760	13,533,857	15,896,617
3. Net amount realized	$35,716,887	$60,842,042	$ 96,558,929
Per Cent of Total Liabilities	*6.7%*	*17.0%*	*10.9%*
D. Distribution of net assets as shown above (C, 3):			
1. Fees and expenses of administration, as analyzed below	$7,230,095	$14,111,971	$21,342,066
2. Paid to bankrupt on account of or in lieu of exemptions	456,879	176,114	632,993
3. Paid to priority, secured, and lien creditors	14,759,199	13,725,379	28,484,578
Per Cent of Corresponding Liabilities (B, 1)	*9.3%*	*25.6%*	*13.4%*
4. Paid to general creditors	$12,828,406	$30,781,344	$43,609,750
Per Cent of Corresponding Liabilities (B, 2+B, 3)	*3.5%*	*10.1%*	*6.5%*

[1]Adapted from *Report of U. S. Attorney General*, 1927, page 178.

TABLE 77 (*Continued*)

STATISTICS OF BANKRUPTCY FOR THE FISCAL YEAR 1927[1]

	Voluntary	Involuntary	Total
5. Other payments	$383,404	$1,916,256	$2,299,661
6. Undistributed balance, if any	58,901	130,976	189,878
7. Total	$35,716,887	$60,842,042	$96,558,929
E. Analysis of fees and expenses of administration:			
1. Paid to referee on account of fees of every nature, excluding filing fees paid by clerk of court—			
(a) Commissions and 25-cent fees for filing claims	$341,913	$432,428	$774,342
(b) Fees as special masters, if any	40,148	60,135	100,283
(c) Other fees, if any	31,931	20,893	52,825
2. Paid to referee on account of expenses—			
(a) For printing and advertising	158,621	33,136	191,757
(b) For traveling expenses	29,459	6,469	35,929
(c) For office, clerical, and all other expenses	857,960	356,436	944,396
3. Paid to marshals, receivers, and trustees on account of commissions, excluding filing fee of $5	1,075,487	1,623,053	2,698,541
4. Paid to attorneys on account of fees	2,405,411	4,900,924	7,306,335
5. All other expenses of administration	2,559,161	6,678,493	9,237,655
6. Total	$7,230,095	$14,111,971	$21,342,066
F. Other data pertaining to property administered:			
1. Appraised value of exemptions set off to bankrupt in kind	$16,183,977	$992,226	$17,176,204
2. Appraised value of property securing debts of bankrupt which was not administered in bankruptcy court	14,739,660	7,354,703	22,094,364
3. Filing fees paid by clerk of court to referee	578,301	81,325	659,626
G. No-asset cases included in this report:			
1. Number of cases	27,425	637	28,062
2. Total fees and expenses of referee (sec. E) in such no-asset cases	$355,764	$74,863	$430,628
H. Number of cases concluded, which were filed in formal pauperis, and in which filing fees were not afterwards paid	2,620	1	2,621

[1]Adapted from *Report of U. S. Attorney General*, 1927, page 178.

shown by the large number of cases, 59,432, still unsettled in 1927. In six years the number of cases pending has increased around 50 per cent, and the total liabilities have increased five-fold.

THE WORK OF ADJUSTMENT BUREAUS

In view of the unavoidably wasteful method of administering the affairs of an insolvent through the bankruptcy courts,

equitable though the procedure may possibly be, numerous attempts have been made to provide for a more speedy and less extravagant administration of the debtor's affairs without resort to bankruptcy proceedings. Frequently, adjustments of this sort are carried on through committees appointed by local chambers of commerce or boards of trade with a view to securing the largest possible distribution of assets to the creditors consistent with economy and fairness to the debtor. The most important step in this direction, however, has been taken by the National Association of Credit Men, which through its various local associations and affiliations now operates directly or indirectly 81 different *adjustment bureaus* throughout the United States. The purpose of these bureaus as defined by the National Association of Credit Men may be summed up as follows:

"1. To investigate upon request the affairs of a debtor reported to be insolvent and adjust the estate when possible without court proceedings.

2. To secure a capable and efficient receiver or appraiser or trustee when court proceedings are found to be necessary.

3. To secure quick adjustment of all honest failures at a minimum cost and with a maximum dividend to creditors.

4. To facilitate and economically secure extensions or liquidations when upon investigation it is found to be to the best interests of all.

5. To influence concerted action by the creditors for the benefit of all.

6. To assist creditors to acquire for their own use the estate of failing or insolvent debtors when mutually agreed upon.

7. To prosecute or assist in the prosecution of the guilty party or parties where investigation discloses fraud or the attempt to defraud."

The purpose of these adjustment bureaus, therefore, is, if possible, to assist in making compositions and securing equi-

TABLE 78

Record of Adjustments Made by the San Francisco Board of Trade

A. Volume of Business

	Fiscal Year Ending									
	March 31 1919	March 31 1920	March 31 1921	March 31 1922	March 31 1923	March 31 1924	March 31 1925	March 31 1926	March 31 1927	March 31 1928
Number of Cases Handled..........	878	759	1,281	2,098	2,162	2,313	2,536	2,519	2,598	2,486
Moneys Disbursed to Creditors.........	$1,002,112	$1,068,658	$902,430	$1,131,824	$1,541,879	$1,905,078	$2,000,352	$1,708,522	$1,801,134	$1,480,125

B. Recoveries for Creditors

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Average Net Recovery...... ...	54%	54%	57%	58%	53%	60%	47%	45%	42%	44%

C. Expenses

Expenses of administration through the Board of Trade including fees and commissions and cash outlays for adjusters and other expenses averaged in all cases on the gross moneys distributed..........10%

Expenses of administration through the Board of Trade in transfer of assets cases (analogous to bankruptcy)..........16%

Expenses of administration by the bankruptcy courts averaged..........33%

table adjustments of creditors' claims without resort to the courts. If bankruptcy proceedings seem desirable, the attempt is then made in behalf of all parties to handle the procedure as expeditiously as possible. Frequently a representative of the local adjustment bureau or local association of credit men will be appointed as a receiver, and thus the administration fees may be reduced to the minimum.

General experience has shown that the results attained by these bureaus are far more satisfactory from the financial point of view than can possibly be secured through the bankruptcy courts. Specific statistical comparisons in this regard are usually misleading on account of the fact that generally only the less serious cases are handled by adjustment bureaus. Further, it should be noted that, as a rule, adjustment bureaus confine their activity to administering the affairs of trading concerns and not of manufacturers. In the former case it is obviously much easier to sell the assets without an undue shrinkage than in the case of manufacturing concerns whose plant and equipment very frequently constitute almost the sole asset available for the payment of dividends to creditors.

Table 78 indicates the "adjustment" experience of the San Francisco Board of Trade, which is affiliated with the National Association of Credit Men. It is a pioneer organization of its kind, and has long been recognized throughout the United States for its efficiency in adjusting the affairs of insolvents within its territory. All cases are handled by the creditors themselves or by committees selected by them from amongst the principal claimants.

THE RULES OF THE GAME

In the light of preceding discussions it should be apparent that the principal causes of financial embarrassment or the lack of real financial success result from a failure to play the business game according to the fundamental rules. These rules have been so frequently stressed throughout the preceding chapters that it scarcely seems necessary to summarize them in this place. The following general points, however, may well

be borne in mind by those who are interested in analyzing or managing the finances of the average business:

1. First of all, be sure that the business is to be engaged in a line of activity which satisfies a real demand.

2. Next, analyze all factors involved with a view to determining whether the launching of this *particular* enterprise is economically justified.

3. Begin humbly and cautiously, with the *minimum* investment in fixed assets.

4. Let the money be furnished primarily by those who are directly and vitally interested in the financial future of the business. Do not separate the control from the financial risk.

5. Under all circumstances the aim should be to finance only by means of common stock issues until such time as the earnings of the business are thoroughly assured. Even for the well-seasoned concern the policy of financing solely by means of common stock issues would be in itself practically sufficient to prevent any business failures. A company cannot fail if its only obligations are to the owners!

6. Do not incur obligations without a definite knowledge of how these obligations are to be met. Always keep open alternative lines of retreat. If financial stringency arises, there will still be many possibilities of financing open to that company which has only common stock outstanding.

7. Go slowly and grow slowly. That expansion will not be too rapid or dangerous which is made through the reinvestment of earnings.

8. Do not expand merely for the sake of securing a larger share of temporary business. It never pays to try to do *all* the business that may be secured. Financial success frequently results from refusing orders rather than accepting them.

9. Get all the advice possible from all sources. Know the facts. Don't guess.

10. Do not make the mistake of thinking that the particular business is unique, and that its problems are wholly different from the problems of other concerns or types of industry.

There may be superficial differences, or even essential differences in methods of operation, marketing, and the like. However, the fundamental rules for financial success are practically the same for all types and sizes of enterprises. Hence it is most advantageous to make comparative studies of other concerns engaged in a similar line of industry. *Research always pays.*

11. Be on friendly terms with at least one good bank. Advise with the banker. Keep open an ample line of credit secured by generous deposits. Then use that line of credit as infrequently as possible. It is an absurd mistake to think that the customer is conferring a favor on the bank merely by borrowing. Both parties will probably be happier in the long run if an ample balance is maintained though the line of credit is not actually used to any great extent.

12. Buy light and for cash. There is always a "buyer's market" for the concern which can pay cash. "There will be no scarcity of wine to him who hath the wherewithal to pay for it." Do not speculate in raw materials, no matter how favorable the prospects may be.

13. Keep an accurate record of costs, and endeavor to plan operations so that the fixed investment will be kept working to the greatest possible capacity at all times. Do not hesitate to invest in new units of equipment which will be more efficient than the old ones, but do not spend money in this manner merely to be in style. The quality and quantity of goods turned out are far more significant than the mere equipment with which these goods are made. Do not increase the size of plant or the scale of operations on the assumption that by so doing the unit costs of operation will necessarily be lowered and greater net profits will be reaped. If expansion is contemplated, every problem connected with the expansion may safely be viewed in the most pessimistic light, inasmuch as the supposed "economies of size" are by no means always realized. It is also well to remember in this connection that the human factors of management and labor relations frequently play a far more important part in this matter of increased size than any mere mechanical or physical efficiency in production.

14. Keep the inventory turning over rapidly, and hold down the investment in accounts receivable. The nearer to a cash basis every business can be put, the farther it will be removed from any possible danger of financial failure. All failures are immediately due to the fact that a company can not pay its bills, but if the company had been operated on a cash basis it would have had no bills to pay. Too easy credit is the rock that has wrecked many a financial boat.

15. Always keep an ample margin of liquid resources in the business and adequate reserves against contingencies. Be liberal in maintenance and depreciation allowances. Liberality in this regard will reduce the amount of interest which must be paid as well as the danger of insolvency. The foregoing, combined with a conservative dividend policy, will be a pretty good insurance against financial embarrassment.

16. Plan the affairs of the business in such a way that the general needs can be clearly forecasted. Estimate the expenditures for different purposes and the sources of income which will enable those expenditures to be made. Hold the maximum probable expenditures within the minimum probable income.

17. Put service before profits. It always pays in the long run. But at the same time do not forget that a business justifies its existence only when it earns money for the owners.

18. Keep in mind constantly the point of view of the competitor and of the creditor. The business which views its liabilities from the point of view of the lender, and which studies its weaknesses as a competitor might do, will probably not have much need to fear financial involvements.

19. Stay on the job. No concern grows so large or so powerful that it can operate itself. Some central guiding hand is usually necessary to bring the most satisfactory financial results. That hand must always be held near the rudder. Authority must be delegated, but a business has grown too large when one man, or a small group, is unable to exercise a dominating influence in that business. On the other hand, the executive himself has grown too *small* when he does not think it necessary to be constantly "on the job," in so far as matters of policy are concerned.

20. It is well to remember that no business can live solely unto itself. A policy of *cooperation* and friendly association will lead to greater financial success than mere unrestricted competition.

21. *Finally, it should be clearly recognized that the biggest financial problem of the average business is its personnel problem. The wage bill is frequently the largest single expense. But, far more important, the invisible losses resulting from inefficiency of labor and/or management, and from needless worry caused by mutual misunderstanding, can soon wreck any business. The most expensive labor is usually the lowest paid.*

Unwarranted conclusions must not be drawn from the foregoing suggestions. As was stated at the beginning of our discussion of business finance, the element of risk can never be eliminated. Every business undertaking is a speculation. The purpose of this volume, however, would not be achieved did it not in some measure serve to point out those methods whereby risks may be reduced to a minimum and the influence of blind chance outweighed by common sense in the conduct of all business operations. *Speculation* is a most stimulating phase of our economic existence. No gain, however, can possibly arise through mere *gambling*.

When the Germans were nearing the gates of Paris, Marshal Foch is said to have sent the following telegram to the French Government:

"My left is giving way, my right is falling back, consequently I am ordering a general offensive, a decisive attack by the center."

Boldness must always be displayed by the business man who would achieve financial success, and he will frequently appear boldest when his position is weakest. This boldness, however, will result most effectively when the man himself is undeceived as to his actual financial position. Optimism for outsiders must be thoroughly tempered by pessimism for oneself. The real business optimist is frequently the man who is most pessimistic at a time when the majority of people are most sanguine.

CHAPTER XXVI

THE PROSPECTUS AND ITS ANALYSIS[1]

The problem—Form of prospectus—Methods of analysis—Regulation of prostectus issues—British Companies Act—Situation in United States—Attitude of Investment Bankers Association—Faults in circulars of security dealers—Confusion in Class "A" and Class "B" stocks—Recent balance sheet figures needed—Things to watch in management—Trend of business—Dangers in oil financing and accounting—Too much financing with bonds—Position of preferred stocks—Overcapitalization in common stocks—Bigger and better balance sheets needed.

IT is customary for investment bankers in selling new corporate securities to issue a "prospectus" or "folder" giving information which may be of interest to the prospective purchaser and so may facilitate the sales. The companies which sell their own securities also make wide use of the prospectus, and the less sound the company, the more flamboyant grows this advertising material. Detailed discussion of the prospectus might better be developed in a book on investments than in the present connection. However, since some understanding of this sort of financial advertising is almost essential to the average man at the present time, it seems desirable at this point to give brief attention to the prospectus.

The type of prospectus issued will depend upon a number of considerations. Chief among these considerations may be mentioned (*a*) the type of business, (*b*) the age of the enterprise, (*c*) the purpose for which money is being raised, (*d*) particularly the class of buyers to whom the securities are being sold, and (*e*) the character of the organization which sells the securities.

Old-established enterprises in well-known lines of industry will ordinarily have their security issues introduced by a brief

[1] The reader who is not familiar with accounting will do well to read Chapter XIV at this point.

and very conservative statement of their history and financial condition, of the conditions of issue and security provided. The better investment banking houses, also, distribute only carefully worded and thoroughly conservative literature.

When an attempt is being made to raise money from the public in order to finance a wholly *new* enterprise, the question of presentation becomes more difficult to handle. In this class of prospectus material one may find almost every example from judicious statement and cautious expression of opinion to the most reckless and sweeping claims and assertions, prophecies, arguments from analogy, and appeals to the cupidity of the prospective purchaser. Most public flotations of new concerns specialize in the latter type of prospectus, and the more speculative the undertaking, the more ornate the language, coloring, and photographic display used in the advertising and presentation of the material. Oil wells and mining ventures thrive on the use of photographs and signed statements of "geologists" and "chemists," and other much heralded but wholly unknown "experts." They are frequently also backed up by testimonials as to the "character" of the promoters of the enterprise.

It is perhaps surprising, but certainly true, that this loud, exaggerated, and wholly deceptive advertising seems to have made in the past an effective appeal to many small savers, among whom teachers, preachers, and physicians have been particularly numerous. As a result of the public attention devoted to some of these questions in recent years it is probable that even fraudulent concerns are now in many instances toning down their prospectus material, so that it will be still more deadly in its subtle appeal, by virtue of the fact that it closely imitates the type of presentation followed by the more reputable investment banking houses.

FORM OF PROSPECTUS

However, it is not primarily the purpose of this writing to explain or "expose" the methods of "shady" finance, but rather to point out the approved policies of sound financial administration. While there are countless varieties of prospectuses,

the typical prospectus presenting the security issue of a thoroughly reputable business—and our concern extends to no other—may usually be supposed to cover such points as the following:

1. There should be a straightforward statement of the nature of the issuing company, the name of the lawfully appointed registrar and transfer agent, if such there be in connection with the stock issue, and the name of the trustee, for a bond issue, together with a statement of the legality of the issue.

2. There should be a clear-cut explanation of the nature of the proposed security issue. This should cover such points as the following: (*a*) the time and conditions of the dividend and interest payments; (*b*) protective provisions, if any, in the interest of the holder; and (*c*) sinking fund provisions.

3. In the case of an issue offered as an "investment," the exact nature of the underlying security should be clearly stated and explained.

4. The prospectus should contain an audited balance sheet, together with a comparative profit and loss statement covering, if possible, a five year period. This may also include a statement as to how valuations of tangible or intangible property are made.

5. There should be an explanation of the nature of the business carried on by the company, together with a statement as to the location of its principal property.

6. A brief history of the growth and development of the organization is also helpful.

7. In cases where large numbers of laborers are employed, a suggestion as to the nature of the company's labor relations may be in order.

8. Finally, it is highly important that the prospectus shall indicate the *purpose* for which money is to be used, though this point is frequently ignored.

When securities are sold through an investment house, the prospectus is usually prepared in their office and based upon data supplied to them by the company. As a general rule, it

may be said that the banking house should include in its prospectus all of the essential information upon which it acted in agreeing to float the issue. If a company sells its own securities there is so much the more reason why a prospectus should contain the fullest and frankest statement of all pertinent information, since the buyer will not then have the moral protection of an investment house. It is little short of criminal for a company to endeavor to secure its capital from outsiders without taking them into its confidence.

METHODS OF ANALYSIS

Innumerable considerations may be raised in analyzing a "prospectus." Enough has already been said to indicate the proper sort of treatment which should be accorded to the publicity literature of the average wholly new or speculative concern. New propositions of this sort should not be publicly financed, and the only thing that can be admired about their literature is the "nerve" manifested by the promoters. Without any analysis whatever such material should be consigned to the waste basket. It is sometimes difficult, however, to draw the line between the perfectly sound enterprise and one which borders upon being fraudulent. Perhaps, therefore, a suggestion of some of the points which should be borne in mind in examining the prospectus of a going concern may here properly be made.

1. What is the reputation of the banking house whose name appears on the circular?

2. What is the business of the company, and what has been its past reputation?

3. Who are the officers and directors of the company? Have they been successful in other lines of enterprise? What are their connections and what is their record? Are they keenly and actively interested in the business, or are they merely figureheads?

"Star" directors, whose attention is centered elsewhere and whose names are being used only for advertising purposes, are an element of weakness and not of strength. Sometimes officers

are mere *dummies*. Further, it frequently happens that men who have been reasonably successful in a certain line of enterprise are put on the board of directors of a company with the type of whose business they are thoroughly unfamiliar. As an example, a large fisheries company was launched in 1918 with a board of directors composed almost solely of small New York business men who knew more about office practise than about the fishing business. The company failed.

4. What would happen to the company if the present management should change? Some companies are wholly dependent upon *one* man.

5. What are the essential features of the proposed issue? How well is it secured? What promises are made? Do the protective provisions really protect?

6. The balance sheet should be carefully analyzed with a view to discovering the value of "tangible" assets and "fixed" assets. "Intangible" items should be ruled out as mere padding. The book value of the proposed security should be ascertained. (See Chapter XIV.) The current position should be tested and the current assets thoroughly analyzed both as to "quality" and quantity.

7. The record of sales and net earnings over a period of several years should be closely examined. It is particularly important to note whether the prospectus mentions only the *average* earnings for a certain period of time or actually gives the earnings year by year. In the latter case the present financial prospects of the company may be clearly indicated, whereas in the former a company on the verge of bankruptcy may be made to appear prosperous. It is frequently necessary to know in what *part* of the last year reported earnings were realized. Conditions sometimes change rapidly.

8. Are the tangible assets properly valued and in good condition?

9. Is the location of the company's plant satisfactory?

10. What is the general competitive situation in this particular line of industry? Will the company probably be able to hold its own or to progress? Is the company going forward or

backward? Will the demand for its product probably continue?

11. Does the company have any labor difficulties? What is the attitude of the management toward labor? Are they "forward looking" or are they ultra-conservative?

12. Why does the company need funds at the present time? How does it propose to use the money raised?

13. Do general business conditions warrant the raising of new capital at the time?

14. Is it probable that the proposed extension or change of business will be profitable?

15. If a consolidation is planned or has already been accomplished, what has been the past record of the consolidating companies, and what is the probability that the change in management or organization will result in economies of operation?

16. Is the argument from "analogy" used in the prospectus in an attempt to appeal to the avarice of the investor? Are ridiculous and unsupportable claims or assertions made?

Some small and wholly unknown concerns offer as an inducement to the buyer of their securities the suggestion that they expect to list the issue on the New York stock exchange, though it is practically impossible to list an issue of less than $5,000,000! Does the prospectus merely by suggestion and innuendo attempt to convey an impression to the reader which is contrary to fact and which, if directly stated, might make the company or the selling house liable to legal action for fraud? In other words, is the investor asked to give up his money largely on the grounds of "faith," "hope" and "charity"? Is an attack made upon the "moneyed" interests or upon Wall Street? If so, the issue is probably fraudulent.

The objection may be raised that the average investor is not competent to make an analysis or investigation along the lines suggested. Certainly this objection is well grounded. The obvious rejoinder would be that the average man should not under *any* circumstances pay *any* attention to *any* kind of prospectus material which comes into his hands. If he does not know enough about finance to decide within reasonable limits

whether or not he is throwing away his hard earned savings, he will be well advised to let his local banker decide the question for him, by keeping his money in a savings account, or by buying government securities. Safety of principal should be his first consideration.

In recent years there has been a veritable orgy of new capital flotations by all classes of companies. Indeed, investment houses have frequently made the statement during the past year or two that they could scarcely get enough new securities to supply their customers. This feverish interest in investment and speculation has led to carelessness both as to the prospectus used and as to the soundness of the company whose securities are being floated.

REGULATION OF PROSPECTUS ISSUES

The abuses arising through the improper use of prospectuses, as well as through the issue of advertising literature by wholly fraudulent promoters, are very serious and far reaching in their effects. Hundreds of millions of dollars of savings are through these channels being constantly diverted from the essential industries. Therefore, it becomes an important concern of the reputable company and the investment banking house to attempt to prevent or reduce the economic waste arising in this manner. In an earlier chapter[1] some mention was made of "blue sky" legislation and its possible effects and limitations. At this point, however, perhaps it may be worth while to call the reader's attention to the method whereby Great Britain has rather effectively prevented the use of fraudulent advertising in connection with security issues.

THE BRITISH COMPANIES ACT (1928)

In the Companies (Consolidation) Act of 1908 a special section was devoted to the "Prospectus." As amended in 1928, the law is more drastic and includes foreign corporations doing business in Great Britain. Also the law applies to the sale of

[1] See Chapter X, p. 236, ff.

securities to the public through a third party as well as direct by the company. In summary, the following points among others are covered:

1. A copy of the prospectus, signed by every person named therein as director, shall be filed with the registrar of companies.

2. The powers and duties of directors shall be carefully indicated.

3. There shall be a clear statement of the method and nature of payment for stock, together with the provisions relative to stockholders.

4. The rights as regards dividend, capital, and voting of all different classes of shares must be stated.

5. The profits for each of the three preceding years, either of the company or of any business to be acquired, must be definitely shown.

6. Particulars must be given of the dividends paid on each class of shares for each of the three preceding years.

7. There must be a statement of promoter's expenses and the methods whereby these expenses are met.

8. The financial interest of directors in property to be acquired must be stated, together with the dates of and parties to every important material contract.

9. The directors or their agents are held strictly liable for any untrue statements or misrepresentations.

10. The "hawking" of shares or securities from house to house, as is customary in the United States, is absolutely prohibited and made a criminal offence.

11. In addition it may be noted that the law prescribes for companies the keeping of true and accurate operating and capital accounts, and prescribes the proper procedure in great detail. Annual reports based on these accounts must be sent to stockholders in due course. Further, every company is required at each annual meeting to appoint an *auditor,* and if the company fails to do so, the Board of Trade may, upon the application of any member of the company, make its own appoint-

ment. No director or officer of the company shall serve as auditor. Any shareholder is entitled to be furnished with a full copy of the balance sheet and auditor's report on payment of a merely nominal sum, if such charge should be imposed by the company.

12. Finally, the Board of Trade may, upon the application of members holding not less than one-tenth of the shares issued, appoint one or more competent inspectors to investigate the affairs of any company and to report thereon.

In general, the purpose of the English law seems to be to provide for reasonable publicity of corporate affairs with a view to assuring wholesome financial practises, rather than to hampering corporate action by numerous restrictive measures.

It would be a boon to the United States if here, also, there were uniform laws on prospectus issues. The rapid growth in securities sales to small investors makes definite action necessary. That our industrial accounting leaves much to be desired, as already indicated in Chapter XIII, and that the present practise is confusing and frequently grossly misleading, is forcefully shown by the 1928 Report of the Industrial Securities Committee of the Investment Bankers' Association of America. After examining some 300 circulars recently issued by investment bankers the committee reported in part as follows:

FAULTS IN CIRCULARS OF SECURITY DEALERS

"It is our endeavor to stress briefly special features that should be examined carefully and, if possible, to try and throw new light on certain of the pitfalls encountered in the consideration of industrial financing.

"No better way can be found than to follow the instructions of the association to this committee, by which it is obliged to examine all the circulars on industrial securities issued by members. No matter how carefully circulars are prepared, some are bound to contain occasional mistakes or omissions, and it is the province and the duty of this committee to look for such and, when they appear to be of a flagrant nature, to bring them to the attention of the house that is responsible. Approximately 300 circulars have been so examined, and we think the association is to be congratulated on the evident desire of its members to follow the advice so ably set forth in the report of the Special Committee on Circulars. As there would be no

point in merely examining these circulars without publishing certain comments, we submit a few features which seem to us deserving of criticism. * * *

CONFUSION IN CLASS "A" AND CLASS "B" STOCKS

"There have been a great many issues of so-called Class 'A' stocks, some with preferential rate of dividend over the Class 'B' or common issue, some without that, and some with a feature of participating over and above a fixed rate after the Class 'B' has received certain dividends. We feel that in many circulars the presentation of earnings applicable to such participating Class 'A' stocks has been a trifle ambiguous, not to say misleading. In no instance have the actual facts been departed from, but figures given do not present the picture which the prospective investor was entitled to see. In one instance a stock entitled to $4.00, showed in a tabulation $11.00 as applicable to dividends; and while this was technically correct, as there was that cushion of $11.00 earned before the $4.00 dividend on the 'A' was in jeopardy, nevertheless after the 'B' had received that to which it was entitled there really remained but about $5.00 applicable to the 'A.' In one circular this was most lucidly set forth, but in many others we have found the matter distinctly ambiguous.

"The question of voting power, particularly in such issues of class 'A,' or common stocks, should be clearly set forth. In few instances have we noted that it was so done. When an investor is buying an equity stock he usually presumes he is buying the same security as that held by the managers or insiders, but it often occurs that the stock offered to the public has no vote and nothing is said about it, and we also feel that this should most carefully be set forth.

RECENT BALANCE-SHEET FIGURES NEEDED

"Another point the committee would like to call attention to is the problem of publishing more recent balance sheets. Some of them are too old. They should be of more recent date. In one case a balance sheet was given as of December 31, the bonds being offered in September. In that balance sheet, which was of the 'adjusted' order, was an item of approximately $4,000,000 cash; yet in November following, the company was in default on a sinking fund payment amounting to approximately $150,000. A later balance sheet should have been submitted and would doubtless have shown a more correct condition of the company's affairs. No further comment seems necessary on such a situation.

"Several circulars were examined in which an offering of preferred

stock was made based upon a business housed in a building on leasehold property. The reference to the fact of a leasehold rental being a prior charge was made in very small type and in a most inconspicuous way. The investor glancing at the circular could easily derive the impression that the dividend on the preferred stock was a first charge on the earnings. Unfortunately, investors, as a rule, do not read circulars carefully, and the average investor would scarcely have noticed the mention made of the leasehold charge. In our opinion these figures should be set forth in just the same manner in which an interest charge on bonds would be placed.

MANAGEMENT—DECAY MUST BE WATCHED FOR

"Your committee could continue indefinitely with features to be criticized, seemingly unimportant, yet really vital, but we feel there is neither time nor space to more than touch on a few points, at random, such as the foregoing.

"So much has been written on industrial financing both within and without this association that we shall only elaborate on one or two important features.

"Management seems to be conceded by all to be the most important requisite. As has been ably epitomized in a previous report, the B. & O. R. R. has recently celebrated its 100th anniversary, yet how many of us buy clothes and necessaries at the same shop for more than perhaps ten years, how many use the same make of automobile for more than such a period? These concisely stated ideas, to our mind, most clearly point out to the investment banker the prime necessity of studying the management of a company he is considering and practising eternal vigilance in watching that management, after the securities have been marketed. Too often has it happened in the past that a management which has built up a successful business, having sold that business to the public through security issues, becomes lax and careless, and too often has it happened that the banker who placed those securities had not kept in close enough touch with the management to protect his interests and those of the public—which is one and the same. Therefore, we feel we cannot lay too much stress upon the necessity of the investment banker inserting a covenant in his original purchase contract by which the information on earnings and general trend of the business will be furnished at frequent and periodical times, and all information, even of a most confidential nature, should be furnished. When the heads of business enterprises will take their bankers into close and intimate confidence, well in advance of any impending crisis, it will be much better for all concerned.

TREND OF A BUSINESS IMPORTANT

"Too careful study cannot be given to the trend of a business; whether the articles manufactured or sold are necessities or luxuries; if patented, whether the licenses are soon to expire; whether the fashions, so to speak, are changing or have remained in the past fairly constant, with every indication of similar constancy in the future; whether a company depends too much on the sale of one type of article, etc. The question of labor—its supply and availability, not only for the plant or enterprise being considered but for all analogous concerns throughout the country—the fluctuations in that particular industry, not omitting to consider, even at this time, the war-time demand or lack of demand, and the post-war situation, the amount of capital employed in this particular industry, and whether there is room for a further expansion. These points should be weighed with scrupulous care by the banker; and though very general are meant to cover the various ramifications of such.

"All of these features are rightly placed under the head of management, for if they have not been well considered by the business management they should be by the banker as part of his 'management.'

PITFALLS IN OIL FINANCE AND ACCOUNTING

"Previous reports have dealt extensively with the proper 'set-up' of industrial securities in general. But it might be pertinent here to say a word on oil company financing. Its importance may be visualized from the fact that last year major pieces of oil financing floated in the American market aggregated approximately $450,000,000. However, your committee will content itself with a brief observation at this time.

"There are two main considerations which the bankers must have in mind when undertaking bond or stock issues of oil companies—management and accounting methods. The management question, of course, applies to every line of industry, but an oil company income account or balance sheet means much or little, depending upon the accounting practises. By one method of accounting a company may show a handsome profit, and by another method the same gross income may be changed to a large deficit. Depletion and intangible drilling costs are items subject to wide latitude in treatment.

"Unfortunately, there is no uniformity of practise in this respect, so unless one has a knowledge of the 'working papers,' a report, though entirely accurate from a technical accounting standpoint, may be quite meaningless or very misleading. The investing public is entitled to know the facts about any security which they are invited to purchase, and issuing houses should see to it that their offering circulars reveal earnings *after* as well as before depletion

and depreciation. They should also disclose whether intangible drilling costs such as labor, etc., are charged directly against operating expenses, or capitalized to be amortized over a more convenient later period. The former method is the more conservative, but the latter one is much in vogue and may be defended as quite proper. The point we wish to make at this time is that there should be no uncertainty left in the public mind as to which method is used, so that there may be no opportunity for a dissatisfied purchaser of such securities to charge misrepresentation at a later date, in the event of the issue declining marketwise.

TOO MUCH FINANCING WITH BONDS

"The structure or form of an industrial security, of course, depends largely on the individual business to be financed. Old and well established corporations, with large assets and earnings, can usually sell a bond, generally a debenture of low interest rate. These are in a class by themselves, and this report has little concern with them. But the method of financing a small and new company has been argued back and forth until the conclusion arrived at is mostly a matter of individual opinion. We believe that such financing should be done by stock issues and not by bonds.

"While it is not the object of this association to instruct or even to point out to its members in setting up a financial structure what risk they or the public should take on a security, this committee nevertheless feels that it is particularly their function to bring to the attention of the association, certain features which they feel should be avoided.

"What we have in mind from a concrete standpoint is a tendency that seems to prevail considerably of late to put too many bonds, either secured by mortgages or debenture issues, on certain industrial corporations rather than relying more on preferred or even common stocks for raising capital. Of course with old, recognized and large companies, this does not amount to so much, but with smaller companies, and newer companies, it is our feeling that financing by bond issues is a matter that should be very carefully weighed, and the issuance of bonds reserved for emergencies as much as possible. The old homely saying about 'an individual's ability to mortgage his house to raise money to apply to his business' in an emergency is perhaps trite, but, nevertheless, the subject of that saying is a matter to be given deep consideration.

"If a member wishes advice on the most expedient, or we might say, enlightened, method of setting up a preferred stock issue, we refer him to the reports above mentioned; but there is one feature that has been suggested previously, yet never, to our knowledge, adopted, that we wish to emphasize—to-wit:

POSITION OF PREFERRED STOCKS

"The covenant in the articles of incorporation by which no bond issue can be placed ahead of a preferred stock issue without the consent of the preferred stockholders is practically universal, but if the management desires to or is compelled to issue bonds, then the preferred stock should have relinquished to them by the common stock some of its equity. The details it is obviously not our province to suggest, but a preferred stockholder is really in the class of a creditor, almost a bondholder, and if his consent is required to mortgage the property he should be given some of the equity he is preserving by his action. It has been contended that he must consent to save the property and therefore is entitled to no compensation. But the days of that sort of attitude have long since passed, nor should the preferred stockholders be disposed to say that he would take all he could get in liquidation, wiping out the common, but join with the latter in working to establish the business on a better foundation and receive from the common stock—that is the management—some sort of return.

"It is our confident opinion that the precepts so ably expounded in previous reports concerning the set-up of preferred stocks, and even debentures, should be followed more strictly. Some houses contend that as a general rule, but subject to certain exceptions, a preferred stock should be represented by a minimum of 100 per cent net quick assets. Certain houses have long demanded a larger percentage; among these exceptions might be mentioned preferred stocks with a conversion feature, warranty attached, etc. Yet we have noted one instance where a company, fairly new and small, put out debenture bonds with scarcely 50 per cent of net quick assets behind them, and these in turn were followed by a preferred stock issue. There are, of course, exceptions to all rules, but a more general adherence to the above will probably avoid a great amount of trouble in the future when business, commercially and financially, may not be so prosperous.

"There is a tendency, occasionally noted, to make a preferred stock appear almost as if it were a debenture bond. This practise should be decried, and while every possible safeguard should be thrown around a preferred stock issue, great care should be exercised in describing that somewhat anomalous form of security.

"There is just one word of caution we would suggest: In drawing up the terms or conditions safeguarding a preferred stock, or even a bond issue, care should be observed not to make them so exacting that they would be an obstruction in the case of an emergency, or the simple necessity of raising more capital.

OVERCAPITALIZING IN COMMON STOCKS

"The question of the issue of common stocks is of such wide and discretionary power that it is difficult to make any suggestions. However, we think a word of caution is in order against the tendency to overcapitalize. In this connection we might be pardoned for expressing the thought that the great competition that has arisen among houses of issue has caused them to pay too high a price for properties, thus compelling overcapitalization. As long as the immutable law of supply and demand holds good it is difficult to see how this can be changed; but it would be better if we could all adhere to the suggestion of our President and 'play ball' among ourselves, with great benefit to ourselves and the investing public.

NEED OF CARE IN BALANCE SHEETS

"In referring to the question of balance sheets, we are treading on dangerous and difficult ground. We do not intend to delve into this intricate and highly specialized side of industrial financing. There is, however, a word or two that could be said here on this subject.

"The difference between a condensed and consolidated balance sheet is vast, yet the average investor does not always note that, and is inclined to consider them identical. Therefore, care should be exercised in presenting the figures, that no ambiguity can creep in.

"The so-called certificate of the accountants should likewise be free from misconstruction or ambiguity. For example, we have noted in a circular a wording that was not clear, whether the balance sheet had been adjusted to show the present financing after the accountants had submitted their balance sheet, or whether they had passed upon it in the adjusted form—made the adjustment themselves.

"In an endeavor to bring the accountants into even closer touch with the bankers, a subcommittee has been appointed from this committee who will collaborate with a committee from the American Institute of Accountants. The function of this subcommittee is to hold itself available to hear complaints, or differences of opinion, that may arise between a member and his accountants, and then take it up with the committee of the institute, for a decision or at least a clarifying opinion. It is not presupposed that this will entail very many occasions for action, but it is felt that such contact will be of benefit to the association. * * *"

APPENDIX
TO APPLIED BUSINESS FINANCE

TABLE 79

Statistics of Manufacturing Concerns by Type of Industry, 1925, and Preliminary Total for 1927

(Includes only concerns with value of product over $5,000)

Industrial Group	Number of Establishments	Per Cent Distribution	Wage Earners			Wages		Cost of Materials ($1,000)
			Total	Per Cent Distribution	Per Establishment	Total ($1,000)	Per Worker	
All industries (1927)	(191,863)	......	(8,351,863)	......	(43.5)	($10,848,782)	($1,300)	($35,128,154)
All industries 1925	187,390	100.0	8,384,261	100.0	44.7	$10,729,969	$1,280	$35,935,648
Food and kindred products.......	48,113	25.7	664,760	7.9	13.8	793,681	1,194	7,748,678
Textiles and their products.......	24,433	13.0	1,627,141	19.4	66.6	1,654,013	1,017	5,348,050
Iron and steel and their products, not inc'uding machinery.....	6,068	3.2	851,270	10.2	140.0	1,284,339	1,509	3,734,350
Lumber and allied products.......	21,922	11.7	921,145	11.0	42.0	978,375	1,062	1,724,983
Leather and its manufactures...	4,264	2.3	315,288	3.8	73.9	356,246	1,130	1,015,123
Rubber products.	498	0.3	141,121	1.7	283.0	190,563	1,350	718,840
Paper, printing and related industries	26,553	14.2	536,766	6.4	20.2	805,516	1,501	1,614,235
Chemicals and allied products..	8,871	4.7	381,075	45.	43.0	506,386	1,329	4,184,911
Stone, clay and glass products..	8,478	4.5	353,036	4.2	41.6	467,012	1,323	603,427
Metals and metal products, other than iron and steel...........	6,924	3.7	275,292	3.3	39.8	380,781	1,383	1,946,777
Tobacco manufactures..........	2,623	1.4	132,132	1.6	50.4	111,558	844	425,769
Machinery, not including transportation equipment..........	11,807	6.3	858,843	10.2	72.7	1,225,359	1,427	1,985,367
Musical instruments and phonographs	461	0.2	46,980	0.6	101.0	62,502	1,330	98,761
Transportation equipment, air, land and water.	2,778	1.5	559,578	6.7	201.0	908,488	1,624	3,389,101
Railroad repair shops..........	2,363	1.3	457,755	5.5	194.0	668,192	1,460	563,646
Miscellaneous products.......	11,234	6.0	262,079	3.1	23.3	336,958	1,286	833,630

TABLE 79 (*Continued*)

Statistics of Manufacturing Concerns by Type of Industry, 1925, and Preliminary Total for 1927

(Includes only concerns with value of product over $5,000)

Value of Products				Value Added by Manufacture		Horse-Power			
Total ($1,000)	Per Cent Distribution	Per Establishment	Per Worker	Total ($1,000)	Per Worker	Total	Per Cent Distribution	Per Establishment	Per Worker
($62,713,947)	......	($327,000)	($7,500)	($27,585,793)	($3,300)	(39,032,014)	......	(203)	(4.7)
$62,713,714	100.0	$334,669	$7,480	$26,778,066	$3,194	35,772,628	100.0	191	4.27
10,418,536	16.6	216,543	15,673	2,669,858	4,016	3,881,952	10.9	81	5.84
9,122,858	14.6	373,383	5,607	3,774,808	2,320	3,986,136	11.1	163	2.45
6,461,668	10.3	1,064,876	7,591	2,727,318	3,203	7,518,999	21.0	1,239	8.83
3,688,552	5.9	168,258	4,004	1,963,569	2,132	3,472,770	9.7	158	3.77
1,767,581	2.8	414,536	5,606	752,458	2,387	413,759	1.2	97	1.31
1,255,414	2.0	2,520,912	8,896	536,574	3,802	656,857	1.8	1,319	4.65
4,143,685	6.6	156,053	7,720	2,529,450	4,712	3,060,794	8.6	115	5.70
6,438,027	10.3	725,739	16,894	2,253,116	5,912	2,984,913	8.3	336	7.83
1,640,652	2.6	193,519	4,647	1,037,225	2,938	2,348,157	6.6	277	6.65
2,833,770	4.5	409,268	10,294	886,993	3,222	1,158,485	3.2	167	4.21
1,091,001	1.7	415,936	8,257	665,232	5,035	42,075	0.1	16	0.32
5,020,281	8.0	425,195	5,845	3,034,914	3,534	2,714,377	7.6	230	3.16
231,687	0.4	502,575	4,931	132,926	2,829	97,318	0.3	211	2.07
5,451,753	8.7	1,962,474	9,743	2,062,652	3,686	1,888,961	5.3	680	3.38
1,332,679	2.1	563,978	2,911	769,033	1,680	942,248	2.6	399	2.06
1,815,570	2.9	161,614	6,928	981,940	3,747	604,826	1.7	54	2.31

TABLE 80

Corporation Returns—Distribution of Number of Returns, Net Income and Net Deficit by Size of Net Income and Net Deficit, by Major Industrial Groups*

(Income returned for the calendar year ended December 31, 1926)[1]

Group Number	Distribution	All corporations: Number of returns	All corporations: Per cent of total	All corporations: Amount	All corporations: Per-cent of total	Agriculture and related industries: Number of returns	Agriculture and related industries: Amount	Mining and quarrying: Per ber of returns	Mining and quarrying: Amount	Manufacturing — All manufactures: Number of returns	Manufacturing — All manufactures: Amount	Manufacturing — Food products, berages, and tobacco: Number of returns	Manufacturing — Food products, berages, and tobacco: Amouht	Manufacturing — Textiles and textile products: Number of returns	Manufacturing — Textiles and textile products: Amount
	Reporting net income:														
	Size of net income—														
1	Under $2,000	118,092	45.75	$104,121,718	1.08	2,607	$2,222,926	2,706	$2,018,531	19,460	$18,198,907	3,681	$3,476,151	2,958	$2,854,103
2	$2,000 to $5,000	50,918	19.73	160,215,419	1.66	881	2,768,955	770	2,481,852	9,508	30,259,407	1,674	5,324,792	1,410	4,428,454
3	$5,000 to $10,000	28,363	10.99	201,434,466	2.08	485	3,400,788	540	3,893,789	6,206	44,502,375	1,052	7,543,068	831	5,909,629
4	$10,000 to $25,000	26,463	10.25	424,743,533	3.39	389	6,109,710	705	11,550,051	7,553	124,712,971	1,208	19,610,836	951	15,809,447
5	$25,000 to $50,000	15,250	5.91	505,981,193	5.23	160	5,718,343	460	16,701,629	4,281	153,947,979	609	21,759,781	572	20,782,501
6	$50,000 to $100,000	8,748	3.39	612,009,482	6.33	96	6,394,910	330	23,283,992	3,321	234,059,544	448	31,232,726	415	29,187,353
7	$100,000 to $250,000	5,966	2.31	917,880,867	9.49	48	7,260,430	264	42,043,813	2,603	402,616,662	343	49,910,491	343	53,501,033
8	$250,000 to $500,000	2,137	0.82	749,611,283	8.75	19	6,692,083	114	41,264,984	1,041	366,324,583	105	36,829,013	125	44,163,750
9	$500,000 to $1,000,000	1,100	0.43	759,354,667	7.85	9	6,339,988	49	35,726,301	574	397,073,274	59	42,217,428	66	46,947,026
10	$1,000,000 to $5,000,000	883	0.34	1,769,642,841	18.29	3	(2)	55	125,195,874	441	876,077,860	59	132,339,626	36	(2)
11	$5,000,000 and over	214	0.08	3,468,407,420	35.85	1	(2)	13	151,637,470	106	1,847,016,544	18	242,196,260	1	(2)
12	Classes grouped[2]	......	......	....	.....	......	23,804,439	......	....	......	....	......	....	......	91,066,021
13	Total reporting net income	258,134	100.0	9,673,402,889	100.0	4,698	70,811,571	6,006	455,798,286	55,094	4,494,790,106	9,239	592,440,172	7,708	314,649,317
	Reporting no net income:														
	Size of deficit—														
14	Under $25,000	183,538	93.08	622,156,073	28.69	5,551	19,285,537	11,947	30,895,402	33,504	193,841,660	5,606	24,306,546	4,602	24,543,234
15	$25,000 to $100,000	10,630	5.39	497,909,273	22.95	364	17,020,675	983	47,274,598	3,561	171,039,723	527	24,380,841	784	38,414,512
16	$100,000 to $500,000	2,619	1.33	520,867,843	24.02	69	11,920,943	276	53,422,699	908	189,824,402	116	22,454,547	286	59,626,530
17	$500,000 to $1,000,000	251	0.13	178,364,712	8.23	3	2,302,645	24	16,457,768	117	83,691,819	8	5,285,364	44	29,257,260
18	$1,000,000 to $2,000,000	94		124,482,493	4.74	2	(2)	9	12,442,137	34	43,111,777	2	2,509,031	6	7,704,758
19	$2,000,000 to $2,000,000	28		66,305,016	3.06	1	(2)	4	9,500,955	14	32,157,587	7	16,472,46	1	(2)
20	$3,000,000 to $4,000,000	12	0.07	41,221,059	1.90	......	....	1	(2)	6	20,797,691	......	....	2	6,858,268
21	$4,000,000 to $5,000,000	6		26,887,189	1.24	......	....	1	(2)	3	13,611,698	......	....	2	8,752,523
22	$5,000,000 and over	8		90,516,644	4.17	......	....	1	(2)	3	38,620,479	......	....	1	(2)
23	Classes grouped[2]	......	......	....	.....	......	5,153,326	......	13,479,303	......	....	......	....	......	20,007,231
24	Total reporting deficit	197,186	100.0	2,168,710,302	100.0	5,990	55,665,126	13,246	183,473,862	38,150	786,686,836	6,266	95,308,802	5,728	195,164,316
25	Grand total—Net income less deficit	455,320	......	7,504,692,587	10,688	......	15,146,445	19,252	272,324,442	93,244	3,708,103,270	15,505	497,131,370	13,436	119,485,001

[1]Fiscal year returns are included. [2]Classes grouped to conceal the amount and identity of taxpayers. [2]Deficit.
*Derived from *United States "Statistics of Income,"* 1926.

TABLE 80 (*Continued*)

Corporation Returns—Distribution of Number of Returns, Net Income and Net Deficit by Size of Net Income and Net Deficit, by Major Industrial Groups

(*Income returned for the calendar year ended December 31, 1926*)[1]

Group Number	Leather and leather products: Number of returns	Leather and leather products: Amount	Rubber and rubber goods: Number of returns	Rubber and rubber goods: Amount	Lumber and wood products: Number of returns	Lumber and wood products: Amount	Paper, pulp, and products: Number of returns	Paper, pulp, and products: Amount	Printing and publishing: Number of returns	Printing and publishing: Amount	Chemicals and allied substances: Number of returns	Chemicals and allied substances: Amount	Stone, clay, and glass products: Number of returns	Stone, clay, and glass products: Amount	Metal and metal products: Number of returns	Metal and metal products: Amount
	Manufacturing—Continued															
1	487	$454,505	121	$106,045	1,337	$1,291,299	304	$311,154	3,064	$2,727,186	1,398	$1,100,110	894	$1,086,261	3,358	$3,094,224
2	248	796,288	42	135,348	808	2,616,396	194	615,864	1,315	4,148,523	576	1,845,372	459	1,480,392	1,968	6,323,757
3	167	1,187,122	31	215,329	583	4,177,170	151	1,078,528	761	5,416,637	389	2,804,362	317	2,278,510	1,394	10,060,228
4	198	3,268,783	41	677,146	732	12,168,388	237	3,873,620	824	13,560,754	552	9,352,945	401	6,678,940	1,833	30,432,050
5	113	3,990,300	29	1,061,899	446	16,106,728	159	5,661,386	386	13,751,150	335	12,237,431	240	8,498,244	1,045	37,639,202
6	77	5,382,786	25	1,817,694	316	21,728,636	123	8,658,113	261	18,746,530	322	22,995,802	194	13,417,609	883	62,797,734
7	63	10,088,131	19	2,782,819	252	37,855,979	98	15,762,595	199	30,357,114	229	36,352,193	137	20,725,018	751	116,041,257
8	45	15,846,746	15	5,865,746	63	21,901,172	52	18,467,085	59	20,443,664	110	37,577,827	53	18,608,008	356	126,808,014
9	8	5,817,262	11	7,526,787	39	25,509,256	25	16,796,335	33	22,591,810	73	48,192,772	33	21,977,327	198	139,328,068
10	6	(2)	4	(2)22	14	(2)	20	38,719,577	26	44,353,129	68	134,215,510	30	66.831,224	155	310,334,024
11	1	(2)	1	(2)	1	(2)	2	10,515,354	3	27,410,472	24	478,480,832	4	33,584,751	48	960,585,487
12	.....	27,027,480	.....	17,312,253	.....	29,616,908	.....	....	.....	....	.....	....	.....	....	.....	....
13	1,413	73,858,674	339	37,500,977	4,591	172,971,932	1,365	120,459,611	6.931	203,506,969	4.076	785,155,156	2,762	195,166,284	11,989	1,803,444,045
14	849	5,023,394	250	1,458,766	2,668	15,333,057	554	2,993,524	3,399	12,387,132	2,807	11,660,748	1,673	7,476,986	7,389	74,420,629
15	177	8,916,075	44	2,116,263	480	23,051,069	81	3,597,434	176	7,884,380	290	13,516,126	141	6,011,842	565	28,800,273
16	50	11,630,600	34	7,847,056	115	21,909,620	20	3,736,081	36	7,064,092	89	18,781,939	27	5,283,799	70	19,246,206
17	1	(2)	9	5,860,970	5	3,401,566	.....	....	2	(2)	22	21,182,109	.....	....	22	14,379,806
18	1	(2)	3	(2)	2	(2)	4	4,035,009	.....	....	.....	....	3	3,339,413	11	15,374,330
19	.....	....	.....	....	.....	....	.....	....	1	(2)	2	4,138,072	.....	....	3	6,795,750
20	.....	....	1	(2)2	1	(2)	.....	....	.....	....	.....	....	.....	....	2	7,402,631
21	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	1	(2)
22	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	2	(2)
23	.....	8,165,819	.....	7,481,050	.....	5,500,455	.....	....	.....	3,670,708	.....	....	.....	....	.....	26,154,676
24	1,078	27,435,888	341	24,764,094	3,271	69,195,767	659	14,362,048	3,614	31,006,312	3,210	69,278,994	1,844	22,112,040	8,065	192,574,301
25	2,491	46,422,786	680	12,736,883	7,862	103,776,165	2,024	106,097,563	10,545	172,500,657	7,286	715,876,162	4.606	173,054,244	20,054	1,610,869,744

[1]Fiscal year returns are included. [2]Classes grouped to conceal the amount and identity of taxpayers. [2]Deficit

TABLE 80 (*Continued*)

Corporation Returns—Distribution of Number of Returns, Net Income and Net Deficit by Size of Net Income and Net Deficit, by Major Industrial Groups

(Income returned for the calendar year ended December 31, 1926)[1]

Group Number	All other manufacturing industries: Number of returns	All other manufacturing industries: Amount	Construction: Number of returns	Construction: Amount	Transportation and other public utilities: Number of returns	Transportation and other public utilities: Amount	Trade: Number of returns	Trade: Amount	Service—professional amusements, hotels, etc.: Number of returns	Service—professional amusements, hotels, etc.: Amount	Finance—banking, insurance, real estate and holding companies, stockholders, etc.: Number of returns	Finance—banking, insurance, real estate and holding companies, stockholders, etc.: Amount	Nominal concerns—nature of business not given: Number of returns	Nominal concerns—nature of business not given: Amount
1	1,858	$1,697,869	4,506	$4,011,762	8,814	$6,253,713	31,471	$28,786,304	9,698	$7,823,573	38,165	$34,361,622	665	$444,380
2	814	2,544,221	2,296	7,099,639	2,357	7,501,986	16,692	52,526,494	3,193	9,962,647	15,132	47,357,808	89	256,631
3	530	3,831,882	1,126	7,928,652	1,249	8,842,423	8,789	62,063,094	1,710	12,221,801	8,212	58,270,249	46	311,295
4	576	9,280,062	1,096	17,575,700	1,269	20,339,941	5,850	91,736,667	1,602	25,616,311	7,977	126,751,708	22	350,474
5	347	12.459,357	476	16,974,437	532	18,877,316	5,170	146,887,022	721	25,309,458	3,440	121,202,927	10	362,082
6	257	18,094,560	298	21,145,189	405	28,243,949	1,888	131,737,744	425	28,690,388	1,980	137,992,970	5	361,796
7	186	29,240,032	196	28,865,439	325	52,139,997	1,023	154,596,475	270	40,180,112	1,235	189,920,792	2	(2)
8	58	19,814,287	51	17,349,830	160	55,403,065	298	102,897,982	71	25,677,779	382	133,741,079	1	(2)
9	29	20,169,203	18	11,870,087	125	85,862,281	119	79,419,523	38	24,775,420	168	118,287,793	......	......
10	23	35,047,263	10	13,906,584	148	324,555,812	91	168,744,722	25	44,299,784	110	213,075,128	......	......
11	3	43,458,233	2	15,841,684	60	1,115,378,138	12	146,161,535	2	16,423,979	18	155,930,708	......	......
12	......	......	......	......	......	......	......	......	......	......	......	......	......	517,046
13	4,681	195,636,969	10,075	162,569,003	15,444	1,723,398,621	71,403	1,165,557,562	17,755	260,981,252	76,819	1,336,892,784	840	2,603,704
14	3.707	14,327,644	6,308	23,613,011	9,030	22,807,151	38,943	154,431,070	13,807	39,348.489	50,459	135,220,055	13,989	2,722,698
15	296	14,350,908	335	14,469,279	416	19,839,410	1,995	89,267,628	563	26,014,594	2,377	111,095,284	36	1,888,082
16	65	12,243,943	49	8,504,543	171	36,916,415	340	61,758,491	120	21,650,961	680	135,181,257	6	1,676,132
17	4	2,187,801	1	(2)	26	18,143,081	14	10,121,662	6	4,276,895	60	42,760,010	......	......
18	2	2,373,978	......	......	10	12,595,261	8	11,007,525	4	5,754,777	27	36,888,547	......	......
19	......	......	1	(2)	2	(2)	2	4,411,683	1	(2)	3	7,084,888	......	......
20	......	......	1	(2)	......	......	......	......	1	(2)	3	(2)	......	......
21	......	......	......	......	1	(2)	......	......	......	......	1	(2)	......	......
22	......	......	......	......	......	......	......	......	......	......	4	45,441,942	......	......
23	......	......	......	7,034,415	......	9,842,855	......	......	......	6,726,026	......	14,360,361	......	......
24	4,074	45,484,274	6,695	53,621,248	9,656	120,174,173	41,302	330,998,059	14,502	103,771,742	53,614	528,032,344	14,031	6,286,912
25	8,755	150.152,695	16,770	108,947,755	25,100	1,603,224,448	112,705	834,559,503	32,257	157,209,510	130,433	808,860,440	14,871	[3]3,683,208

[1] Fiscal year returns are included.
[2] Classes grouped to conceal the amount and identity of taxpayers.
[3] Deficit.

TABLE 81
Leading Bond Houses
A—List of houses participating in syndicates over $100,000,000, 1928[1]

Harris, Forbes	$965,218,000	Lehman Bros.	$197,981,726
Guaranty Co.	928,686,000	Kean, Taylor	185,374,500
Nat. City Co.	896,796,100	Un. Tr., Cleve.	182,000,000
Rollins & Sons	837,028,000	Langley & Co.	181,868,000
Halsey, Stuart	789,837,000	Phelps, Fenn	181,528,500
Lee, Higginson	774,426,000	Hemphill, Noyes	176,550,000
Cont. Nat.	667,470,000	Geo. B. Gibbons	173,054,000
Brown Bros.	626,571,000	Speyer & Co.	171,000,000
Ill. Merchants	575,868,000	R. L. Day & Co.	168,476,500
Bankers Co.	566,482,100	Hallgarten	166,732,000
Un. Tr., Pitsbgh.	486,622,000	Estabrook	162,317,000
Equitable Tr.	445,730,000	Cassatt & Co.	154,351,000
J. & W. Seligman	442,000,000	Hill, Joiner	151,654,000
Field, Glore	407,440,000	W. A. Harriman	147,000,000
Bonbright	399,715,100	Nat. Park Bk.	145,100,000
Graham, Parsons	372,637,000	L. F. Rothschild	143,000,000
Old Colony	371,344,000	Shawmut Corp.	142,500,000
Dillon, Read	360,776,000	Dewey, Bacon	140,571,000
1st Nat., Boston	345,901,000	R. M. Schmidt	138,909,000
Kissel, Kinnicutt	338,683,000	J. G. White	134,500,000
First Nat. Bank	319,493,000	R. H. Moulton	130,273,000
Chase Sec.	315,843,000	White, Weld	128,872,000
St. & Web. & Blod.	315,140,000	1st-Chicago Corp.	127,800,000
Wm. R. Compton	306,006,000	Hayden, Stone	124,750,000
Int. Ac. Bank	281,642,000	Scholle Bros.	122,000,000
Blyth, Witter	281,496,000	Schroder	121,896,000
Detroit Co.	264,075,000	A. G. Becker	121,133,000
Nor. Tr., Chicago	257,056,000	Wood, Gundy	116,565,000
Redmond & Co.	254,200,500	Chat. Phenix	116,396,000
Ames, Emerich	250,514,500	Nickerson & Co.	114,000,000
Guardian, Detroit	250,375,000	Royal Secur.	113,500,000
A. B. Leach & Co.	248,842,000	C. D. Barney & Co.	113,000,000
Blair & Co.	245,654,000	Pearsons-Taft	107,800,000
Kuhn, Loeb & Co.	240,267,000	Am. Trust Co.	107,000,000
Howe, Snow & Co.	232,050,000	Foster, McConnell	107,000,000
Otis & Co.	231,313,000	Lazard Freres	107,000,000
Byllesby	230,796,000	Sutro Bros.	107,000,000
1st Tr. & S. Bk.	230,055,000	Robt. Winthrop	107,000,000
Federal Sec.	225,100,000	J. P. Morgan & Co.	103,006,000
Kidder, Peabody	223,000,000	Bancitaly Corp.	102,818,500
Ed. B. Smith	215,951,000	S. W. Straus	102,350,000
Eldredge & Co.	214,173,500	Am. Nat. Co., 'Frisco	102,000,000
1st Nat., Det.	211,996,000	Kountze Bros.	100,874,332
Mellon Nat.	208,856,000		

[1] *Wall Street Journal*, February 26, 1929.

TABLE 81 (*Continued*)

Leading Bond Houses

B—First 20 bond houses, 1927[2]

The following table shows the leading twenty syndicate heads for 1927, together with offerings (unit: $1,000):

House	As Syndicate Head	As Participant	Total
J. P. Morgan & Co.	$502,590	....	$ 502,590
National City Co.	435,616	$1,154,695	1,590,311
Kuhn, Loeb & Co.	423,988	20,640	444,628
Harris, Forbes & Co.	419,086	938,319	1,357,405
Dillon, Read & Co.	400,980	168,100	569,080
Halsey, Stuart & Co.	321,110	469,059	790,169
Lee, Higginson & Co.	295,600	982,872	1,278,472
Blair & Co.	269,625	322,580	592,205
Drexel & Co.	218,578	40,000	258,578
First National Bank	169,125	659,530	828,655
Guaranty Co.	162,714	1,050,690	1,213,404
Alex. Brown & Sons	153,075	54,720	207,795
Bankers Trust Co.	152,943	668,893	821,836
Chase Security Corp.	135,896	172,550	308,446
Union Trust, Pittsburgh	135,000	432,515	567,515
Bonbright & Co.	97,250	294,762	392,012
H. M. Byllesby & Co.	91,500	236,400	327,900
J. & W. Seligman & Co.	90,500	220,987	311,487
Hallgarten & Co.	88,125	210,163	298,288
Equitable Trust Co.	83,643	370,430	454,073

[2] *New York Times*, February 11, 1928.

LISTING RULES
OF NEW YORK STOCK EXCHANGE

The following schedules indicate the present requirements and regulations of the New York Stock Exchange with respect to the listing of new securities. Even more drastic rules are at present being formulated.

COMMITTEE ON STOCK LIST
NEW YORK STOCK EXCHANGE

July 1, 1925.

The Committee will meet Mondays at 3:15 p.m.

An application, *conforming to these requirements,* signed by an executive officer of the applying corporation, voting trustees, or depositary committees, and nine printed or typewritten copies must be filed with the Secretary of the Exchange at least five days prior to date set for consideration.

Applications must be accompanied by the required papers and agreements, and by a check for one hundred dollars for each $1,000,000 or portion thereof, of each class of security (including stock of the par value of $100 per share), or where stock of a par value of less than $100 per share check for one hundred dollars for each 10,000 shares or portion thereof, or where stock without nominal or par value check for one hundred dollars for each 10,000 shares or portion thereof, checks to be drawn to the order of "Treasurer, New York Stock Exchange." In addition, companies making application are required to pay cost of printing. Printers' bills will be submitted directly to the applicant. (*Amended schedule attached.*)

An application for listing Governmental, State, County, or Municipal securities must be signed by a properly accredited official or by financial representatives, and be accompanied by required check, as above, and papers.

Specimen application furnished on request.

THE EMPLOYEES OF THE COMMITTEE ON STOCK LIST ARE INSTRUCTED TO ASSIST IN THE PREPARATION OF APPLICATIONS TO LIST WHENEVER SO REQUESTED. NO CHARGE WILL BE MADE FOR SUCH SERVICE.

REQUIREMENTS FOR ORIGINAL LISTING

STOCK

(For form of certificates eligible to be listed under this classification, and list of papers to be furnished, see pages — — — and —.)

Every application for an original listing of capital stock shall recite:

A Where incorporated.
B (1) Amount applied for (whether temporary or permanent certificates); (2) authorized issue.
C (1) Date of charter; (2) duration.
D (1) Business; (2) special rights or privileges under charter or by-laws.
E (1) Whether capital stock is full paid; (2) non-assessable; and (3) whether liability attaches to shareholders.

F (1) Issues (by classes), dividend rate and par value; (2) total amount of each, authorized and issued; (3) increases and authority therefor, including (*a*) action by stockholders, (*b*) by directors and (*c*) by public authorities, etc.; (4) amount unissued, (*a*) options or contracts on same, (*b*) specific reservation for conversion.

G If preferred stock; (1) whether cumulative or non-cumulative; (2) preferences, including (*a*) voting power; (*b*) dividends; (*c*) distribution of assets on dissolution or merger; (*d*) redemption; (*e*) convertibility; (*f*) special provisions.

H Voting power of obligations of debt.

I (1) Purpose of issue; (2) application of proceeds; (3) amount issued for securities, contracts, property; description and disposition; (4) additional property to be acquired, with particulars, as required by paragraph *N*.

J (1) History of corporation; (2) of predecessor companies or firms, with location and stock issues (by classes); (*b*) conditions leading to new organization.

K Tabulated list of constituent, subsidiary, owned or controlled companies showing (*a*) date of organization; (*b*) where incorporated; (*c*) duration of charter; (*d*) business and (*e*) capital stock issues (by classes), par value, amount authorized, issued. owned by parent company.

L (1) Mortgage, and (2) other indebtedness showing (*a*) date, (*b*) maturity, (*c*) interest rate, (*d*) convertibility, (*e*) redemption by sinking fund or otherwise, (*f*) amount authorized, and (*g*) amount issued; (3) similar information regarding mortgage and other indebtedness of constituent, subsidiary, owned, or controlled companies.

M Other liabilities, joint and several, (1) guaranties, (2) leases, (3) traffic agreements, (4) trackage agreements, (5) rentals, (6) car trusts, etc., (7) terms of each, and provision for payment; (8) similar description of other agreements or easements; (9) similar information as to constituent, subsidiary, owned or controlled companies.

N (1) Description, location, nature and acreage of property, (*a*) owned in fee; (*b*) controlled; (*c*) leased; (2) railroads, mileage completed, operated and contemplated; (3) equipment; (4) character of buildings and construction; (5) tabulated list of franchises showing (*a*) where granted, (*b*) date, (*c*) duration, (*d*) purpose; (6) timber, fuel or mining lands, water rights; (7) similar information as to constituent, subsidiary, owned or controlled companies.

O Policy as to depreciation.

P (1) Character and amount of annual output for preceding five years; (2) estimated output (character and amount) for current year; (3) number of employees.

Q (1) Dividends paid or declared; (2) by predecessor, and constituent, subsidiary, owned or controlled companies.

R Financial statements; (1) earnings for preceding five years, if available with interest charges, depreciation and federal taxes; (2) income and surplus account of recent date for at least two years, if available; (3) balance sheets of same dates; (4) balance sheet giving effect to recent financing, if any; (5) similar accountings for predecessor, constituent, subsidiary, owned or controlled companies; (6) corporation consolidated within one year previous to date of application, income and surplus account and balance sheet of all companies merged and balance sheet of applying corporation; (7) if in hands of receiver within one year previous to date of application, (*a*) income account and balance sheet of receiver at time of discharge if available, (*b*) balance sheet at close of receivership if available, and (*c*) balance sheet at date of reorganization.

S Agreements contained on pages 5 and 6.

T Fiscal year.

U Place and date of annual meeting

V Location of principal and other offices.

W Names of (1) directors, classified, with addresses; (2) officers; (3) transfer agents, with addresses; (4) registrars, with addresses.

In addition to the above, applications from corporations which own or operate mines must recite:

A Patented and unpatented claims, by numbers.

B (1) Geological description of country; (2) location and description of mineral and other lands; (3) ore bodies; (4) average value of ore; (5) character and analysis; and (6) methods of treatment.

C History of workings; (1) results obtained; (2) production each year.

D (1) Ore reserves compared with previous years showing separately as to character and metal content; (2) estimate of engineer as to probable life of mines; (3) probabilities by further exploration.

E (1) Provisions for smelting and concentration; (2) proximity of property to railway or other common carrier.

F Properties in process of development; income account if available; guarantees for working capital and for completion of development in event income account not available.

G Total expenditures for preceding five years for acquisition of new property, development, proportion charged to operations each year.

H (1) Policy as to depletion; (2) acquisition of new property; (3) new construction and development.

I Production by tons, number of tons of ore treated, average assay yield, percentage of extraction, recovery per ton of ore, for preceding five years, if available.

In addition to the above, applications from corporations which own or operate oil and gas wells must recite:

A (1) Brief history of oil field; (2) geological description of country; (3) character and gravity of oil.

B (1) Total area of oil land (developed and undeveloped), (*a*) owned, (*b*) leased, (*c*) controlled, (*d*) proven, (*e*) under exploitation, (*f*) royalties.

C (1) Number of wells (oil or gas) on each property, (*a*) in operation, (*b*) drilling, (*c*) contemplated, (2) average depth of wells drilled, (*a*) shallowest, (*b*) deepest, (*c*) probable life; (3) whether oil sands are dipping.

D (1) Gross daily production—initial and present; (2) annual gross production from each property for preceding five years, if available; (3) estimated gross production for current year.

E (1) Storage, capacity and location; (2) (*a*) amount of oil stored, (*b*) character, (*c*) value, (3) pipe line, (*a*) gauge, (*b*) capacity, (*c*) mileage.

F (1) Refineries, (*a*) capacity, (*b*) acreage, (*c*) employees, (*d*) products and by-products.

G Properties in process of development; income account if available; guaranties for working capital and for completion of development in event income account not available.

H Total expenditures for preceding five years for acquisition of new property, well drilling and development, proportion charged to operations each year.

I (1) Policy as to depletion; (2) acquisition; and (3) development of new properties.

(Note: For requirements as to voting trust or stock trust certificates, or certificates of deposit, see page —.)

BONDS

(For form of securities eligible to be listed under this classification, and for list of papers to be furnished, see pages — — — — and —.)

An application for an original listing of bonds shall recite all information required for listing stock, *and*

A (1) Full title; (2) amount applied for (whether temporary or permanent), denominations and numbers; (3) amount authorized and outstanding, authority therefor, including (*a*) action by stockholders, (*b*) directors, and (*c*) public authorities, etc.; (4) whether bonds are coupon (registerable as to principal) or registered, interchangeable or exchangeable; (5) exchangeability or convertibility into other securities, and terms.

B Names and addresses of trustees.

C (1) Date of issue and maturity; (2) interest rate; (3) places at, and dates for payment of interest and principal; (4) where registerable or transferable; (5) kind and standard of money, and options; (6) tax exemptions; (7) whether redeemable or purchasable in whole or part by sinking fund or otherwise, showing (*a*) dates, (*b*) price, (*c*) duration and place of published notice; (8) specified reservation of stock for conversion.

D Provisions for declaration of principal due and payable in event of default of payment or interest, or other defaults, and waiver; percentage of outstanding bonds controlling trustee.

E Purpose of issue and application of proceeds, similar to that called for by Paragraph *I* of the Requirements for Listing Stock; provisions as to additional issue.

F Disposition of bonds refunded, redeemed or purchased for sinking fund, and mortgage securing same.

G Mortgage or indenture provisions for (1) serial issues; (2) values in United States gold coin; (3) issuance in foreign languages and (4) that the English version governs; (5) terms of exchangeability of bonds payable in foreign places for bonds payable in United States or vice versa.

H (1) Security—Mortgage, indenture of trust, or other agreement; and (2) liens, (*a*) properties covered, (*b*) mileage of railway lines, (*c*) buildings, (*d*) equipment, (*e*) securities, (*f*) rights, (*g*) privileges, (*h*) titles, (*i*) franchises, (*j*) leases, etc.; (3) other liens covering same or any part of same properties, (4) guaranty and terms.

I Any unusual provisions or covenants contained in mortgage, or deed of trust.

REQUIREMENTS FOR LISTING OF ADDITIONAL AMOUNTS

(For list of papers to be furnished, see pages — and —.)

Refer to previous applications and last application by number and date, and recite:

A Where incorporated.

B (1) Amount applied for; (2) amounts authorized and outstanding; (3) authority for issue, including (*a*) action by stockholders, (*b*) by directors, and (*c*) by public authorities, etc.; (4) total amount applied for.

C (1) Purposes of issue; (2) application of proceeds; (3) amount, description and disposition of securities exchanged for new issues; (4) additional property acquired or to be acquired, with particulars as required by Paragraph *N* on page 2.

D Dividends paid and declared since previous application.

E Changes, if any, in (1) charter; (2) by-laws; or (3) capitalization since previous application.

F Changes in property, if any, since previous application.

G (1) Character and amount of output since previous application or earnings as in application for original listing; (2) estimated output (character and amount) for current year; (3) number of employees.

H Income account, surplus account and balance sheet of record date, also for constituent, subsidiary, owned or controlled companies, or a consolidated income account, consolidated surplus account and a consolidated balance sheet.

I Policy as to depreciation and depletion.

J Fiscal year, place and date of annual meeting, location of offices, and names of officials as covered by Paragraphs *T, U, V* and *W* on page 2.

(Note: "When a corporation purposes to increase its authorized capital stock, thirty days' notice of such proposed increase must be officially given to the Exchange before such increase may be admitted to dealings.")

(Note: "When the capital stock of a corporation is increased through conversion of convertible bonds already listed, the issuing corporation shall give immediate notice to the Exchange and the Committee on Stock List may, thereupon, authorize the registration of such shares and add them to the list.")

REQUIREMENTS FOR LISTING OF CERTIFICATES OF DEPOSIT, VOTING TRUST OR STOCK TRUST CERTIFICATES, ETC.

(For form of certificates to be listed under this classification, and for list of papers to be furnished, see pages — — — — and —.)

Every application for the listing of certificates of deposit, voting trust or stock trust certificates, etc., shall recite:

A (1) Name of applicant; (2) amount applied for (whether temporary or permanent certificates); (3) depositary; (4) security deposited, and whether listed; (5) registrar.

B (1) Date of agreement; (2) names of committee, or voting trustees; (3) terms of trust; (4) powers and duties of committee, trustees, or depositary.

C Reasons for deposit.

D (1) Duration of trust or deposit; (2) extensions or limitations; (3) final date of deposits; (4) provision for deposits without penalty for approximately thirty days after listing, or if no time limit for deposit of securities without penalty is fixed, an agreement that approximately thirty days' notice of such limitation of time shall be published and given to the Stock Exchange; (5) date of presentation of plan; (6) provisions for dissent and withdrawal; (7) percentage necessary to adoption; (8) pro rata, charges; (9) provisions for return of securities (or equivalent); (10) provision for payment of interest dividends, etc.

E Applications to list Voting Trust or Stock Trust Certificates to recite financial statements of company as in Paragraph *R* on page 2.

F Agreement to deliver definitive securities at termination of Voting Trust or Voting Trust to be extended.

G Agreement to have definitive securities listed.

H Agreement by Voting Trustees to have company publish its financial statements.

I Agreements contained on pages 5 and 6.

(Note: Applications to list voting trust or stock trust certificates and certificates of deposit for securities not a delivery on the Stock Exchange must, in addition, comply with the Requirements.)

Applications for each class of deposited securities shall be separate and certificates issued of distinctive colors.

PAPERS TO BE FILED WITH APPLICATIONS

In addition to application for listing, the following papers must be filed:

For Stocks:

1. Three copies of charter, with amendments to date, one copy attested by proper public authority.
2. Three copies of by-laws, with amendments to date, one copy attested by an executive officer of corporation.
3. Three copies of leases, franchises, easements and special agreements, one copy of each attested by an executive officer of corporation.
4. One copy of resolutions of stockholders and directors and copy of proper

public authority authorizing issue, each attested by an executive officer of corporation.

5. One copy of resolutions of stockholders or directors, and copy of proper public authority, authorizing issue of stock on conversion or other securities, attested by an executive officer of corporation.

6. One copy of resolutions of stockholders or directors directing specific reservation of authorized stock for conversion, attested by an executive officer of corporation.

7. One copy of resolutions of stockholders, board of directors, or executive committee attested by an executive officer of corporation, authorizing, by name, official to appear for listing securities (form may be had on application).

8. Opinion of counsel (not an officer or director of the corporation) as to legality of (*a*) organization, (*b*) authorization, (*c*) issue, and (*d*) validity of securities. *The Committee will not accept the opinion of an officer or director of an applying corporation nor of a firm in which the officer or director is a member, as counsel on any legal question affecting the corporation; nor will it accept the opinion of an officer or director of a guarantor corporation nor of a firm in which the officer or director is a member, on any legal question affecting the issuance of guaranteed securities.*

9. Six copies of detailed distribution of securities, one certified (form may be had on application).

10. One copy of resolution appointing transfer agent and registrar, attested by an executive officer of corporation.

11. Certificate of registrar of amount of securities registered at date of application.

12. Report of qualified engineer covering actual physical condition of property at recent date.

13. Map of property and contemplated extensions.

14. Specimens of all securities to be listed.

15. Questionnaire (form may be had on application).

16. Certified copy of income accounts, surplus accounts and balance sheets contained in application.

17. Agreements.

18. Certified copy of printed circular issued by Bankers describing security, if available.

For Bonds:

19. All papers required for listing stocks and also ten copies of the mortgage or indenture, one copy (*a*) certified to by trustee, (*b*) with copies of all certificates of proper recording.

20. Trustees' certificate required on page 6.

21. One copy of resolutions of stockholders or directors, and copy of proper public authority, authorizing issue of stock on conversion of bonds, attested by an executive officer of corporation.

22. One copy of resolution of stockholders or directors directing specific reservation of authorized stock for conversion, attested by an executive officer of corporation.

23. Certificate of disposition of securities redeemed or refunded.

24. Certificate as to collateral deposited.

25. Certified copy of release or satisfaction of underlying mortgages.

For Securities of Reorganized Corporations:

1. All papers required for listing stocks and bonds. *Opinion of counsel shall state that proceedings have been in conformity with legal requirements, that title to property is vested in new corporation and is free and clear from all liens and incumbrances, except as distinctly specified; and also as to equities of securities of predecessor corporation.*

2. Certified order of court confirming sale on foreclosure or other authority for reorganization.
3. Certified copy of plan of reorganization.
4. Certified income and surplus account and balance sheet at close of receivership, if available.
5. Certified balance sheet at date of reorganization.

For additional amounts:

1. Nos. 4, 5, 6, 7, 8, 9, 11, 15, 16, 17, 18 of papers required for original listings.
2. Nos. 1, 2, 3, 10, 12, 14 of said papers for stock, *if any changes have occurred therein since previous application.*
3. Nos. 1, 2, 3, 12, 14, 20, 21, 22, 23, 24, 25 of said papers for bonds, *if any changes have occurred therein since previous application.*
4. Certified copy of proper public authority for increase.

For Certificates of Deposit, Voting Trust, etc.:

1. Papers required for listing stocks and bonds.
2. Certified copies of any legal proceedings and court orders.
3. Three copies of deposit or trust agreement, one certified to by proper authority.
4. Three copies of circulars, issued by trustees or committee, one certified to by proper authority.
5. Certificates of amounts deposited.

AGREEMENTS

To be made part of applications where applicable:

1. Not to dispose of an integral asset or its stock interest in any constituent, subsidiary, owned or controlled company, or allow any of said constituent, subsidiary, owned or controlled companies to dispose of an integral asset or stock interest in other companies, unless for retirement and cancellation, without notice to the Stock Exchange.
2. To publish once in each year and submit to the stockholders, at least fifteen days in advance of the annual meeting of the corporation, a statement of its financial condition, a consolidated income account covering the previous fiscal year and a consolidated balance sheet showing assets and liabilities at the end of the year; or an income account and balance sheet of the parent company and of all constituent, subsidiary, owned or controlled companies.
3. To maintain, in accordance with the rules of the Stock Exchange, a transfer office or agency in the Borough of Manhattan, City of New York, where all listed securities shall be directly transferable, and the principal of all listed securities with interest or dividends thereon shall be payable; also a registry office in the Borough of Manhattan, City of New York, other than its transfer office or agency in said city, where all listed securities shall be registered.
4. To notify the Stock Exchange thirty days in advance of the effective date of any change in the authorized amounts of listed securities.
5. Not to make any change in listed securities, of a transfer agency or of a registrar of its stock, or of a trustee of its bonds or other securities, without the approval of the Committee on Stock List, and not to select as a trustee an officer or director of the company.
6. To notify the Stock Exchange in the event of the issuance or creation in any form or manner of any rights to subscribe to, or to be allotted, its securities, or of any other rights or benefits pertaining to ownership in its securities, so as to afford the holders of its securities a proper period within which to record their interests, and that all rights to subscribe or to receive allotments and all other such rights and benefits shall be transferable; and shall be trans-

ferable, payable and deliverable in the Borough of Manhattan, City of New York.

7. To notify the Stock Exchange of the issuance of additional amounts of listed securities, and make immediate application for the listing thereof.

8. To publish promptly to holders of bonds and stocks any action in respect to interest on bonds, dividends on shares, or allotment of rights for subscription to securities, notices thereof to be sent to the Stock Exchange, and to give to the Stock Exchange at least ten days' notice in advance of the closing of the transfer books or extensions, or the taking of a record of holders for any purpose.

9. To redeem Preferred Stock in accordance with the requirements.

10. To notify the Stock Exchange if deposited collateral is changed or removed.

11. To have on hand at all times a sufficient supply of certificates to meet the demands for transfer.

The Committee recommends a date be fixed as record for dividends, allotment of rights and stockholders' meetings, without closing the transfer books.

Notice of rights, allotments, subscription privileges, to bondholders and shareholders, should be as of a date after authorization.

TRUSTEES OF MORTGAGES

The Committee recommends that a trust company or other financial corporation be appointed trustee of mortgages, indentures, and deeds of trust; and when a State law requires the appointment of an individual as trustee, a trust company or other financial corporation be appointed as co-trustee.

Each mortgage, indenture, or deed of trust should be represented by a separate trustee.

The Committee will not accept as trustee:

(*a*) An officer or director of the issuing corporation;

(*b*) A corporation in which an officer of the issuing corporation is an executive officer.

The trustee shall present a certificate accepting the trust and certifying (1) securities are issued under the terms of the mortgage or indenture, giving the numbers, denominations and amount authenticated; (2) collateral deposited; (3) disposition of prior obligations. For additional issues of bonds, the trustee must certify that (1) increase is in conformity with terms of mortgage or indenture, giving numbers, denominations and amount authenticated; (2) additional collateral deposited; and (3) disposition of prior obligations.

The company and trustee shall notify the Stock Exchange of the holding, cancellation, or retirement of securities, by redemption, through the operation of sinking fund or otherwise.

The trustee must notify the Stock Exchange if deposited collateral is changed or removed, and furnish a list of collateral substituted.

A change of trustee shall not be made without the approval of the Committee.

TRANSFER AND REGISTRY

Every corporation whose securities are listed upon the Stock Exchange must, in accordance with the rules of the Exchange, maintain (*a*) a transfer office and (*b*) a registry office, both in the Borough of Manhattan, City of New York. The transfer agency and registrar *shall not be identical,* and both must be acceptable to the Committee. A company cannot act as registrar of its own stock.

Where a stock is transferred at the company's office, the transfer agent or transfer clerk shall be appointed by specific authority of the board of directors to *countersign* certificates, in said capacity, and shall be other than an officer who is authorized to sign certificates of stock.

The entire amount of the capital stock of a corporation listed upon the Stock Exchange *must be directly transferable* at the transfer office of the corporation in the Borough of Manhattan, City of New York. When a corporation makes transfer of its shares in other cities, certificates shall be interchangeably transferable, and *identical in color and form,* except as to names of transfer agent and registrar; and the combined amounts of stocks registered in all cities shall not exceed the amount authorized to be listed.

Interchangeable certificates must bear a legend reciting the right of transfer in New York and other cities.

The registrar must file with the Secretary of the Stock Exchange an agreement to comply with the requirements in regard to registration and *not to register any listed stock, or any increase thereof, until authorized by the Committee.*

Certifications of transfer and registry must be dated and signed by an authorized officer of the transfer agent and registrar, respectively.

A change in the form of a security, of a transfer agency, or of a registrar, shall not be made without the approval of the Committee.

FORMS OF CERTIFICATES, ENGRAVING, ETC.

General Requirements

(See Specific Requirements below.)

All securities for which listing upon the Exchange is requested, except as otherwise herein stated, must be engraved and printed in a manner satisfactory to the Committee from at least two steel plates by an engraving company whose work the Committee is authorized by the Governing Committee to pass upon; the name of the engraving company must appear upon the face of all securities and also upon the face of coupons and the title panel of each bond. Securities must bear a vignette upon their face.

Said plates shall be: (1) *A border and tint plate* from which should be made a printing in color underlying important portions of the face printing; (2) *A face plate* containing the vignettes and descriptive or promissory portion of the document, which should be printed in black or in black mixed with a color. The combined effect of the impression from these plates must be as effectual security as possible against counterfeiting.

The printing of securities must be in distinctive colors, to make classes and denominations readily distinguishable.

All certificates, except as otherwise stated herein, must provide for transfer and for registration with dates. When a corporation makes transfers of its shares in other cities, certificates shall be identical in color and form, except as to names of transfer agent and registrar; certificates interchangeably transferable must bear a legend reciting the right of transfer in New York and other cities.

The Committee recommends that the text of securities shall provide for transfer in person or by duly authorized attorney upon surrender of the security properly endorsed.

A change in the form of a security, transfer agency, registrar, or trustee of bonds, shall not be made without the approval of the Committee.

The Committee will object to any security upon which an impress is made by a hand stamp, except for a date or power of substitution.

Bonds

(In addition to the General Requirements above outlined, the following apply specifically to bonds.)

All bonds must be fully engraved and printed in a manner satisfactory to the Committee; face of bonds and coupons must bear a vignette.

The text of bonds should recite conditions of issuance, tax exemption, terms of redemption (by sinking fund or otherwise), convertibility, default, inter-

changeability or exchangeability of coupon and registered bonds, and conversion into other securities.

Bonds, in the text and on the reverse, must recite payment of principal and interest in the Borough of Manhattan, City of New York, and provide for transfer and registration. Coupons must recite payment of interest in the Borough of Manhattan, City of New York, and tax exemption.

Registered bonds must carry a power of assignment in such form as the Committee may approve.

The Committee recommends that registered bonds be made interchangeable with coupon bonds.

Registered bonds interchangeable with coupon bonds shall bear a legend reciting numbers and denominations of coupon bonds, against which they are issued.

If coupon bonds of any denomination are interchangeable with coupon bonds of other denominations they shall contain such recital in the text and bear an appropriate legend on the reverse.

Registered bonds made such by detaching coupon sheets are not eligible for listing.

Forms of Legends for Bonds

For coupon bonds of one denomination interchangeable with coupon bonds of other denominations:

"As provided in the Indenture, coupon bonds of the denominations of $1,000, $500 or $100, at any time outstanding, when surrendered with all unmatured coupons attached and upon the payment of charges, may be exchanged for an equal aggregate principal amount of coupon bonds of any other denomination of the same issue, of numbers not contemporaneously outstanding, with all unmatured coupons attached."

For a coupon bond of a thousand dollars exchangeable for coupon bonds of smaller denominations:

"The holder of this bond may, at his option, on surrender and cancellation and on payment of charges, as provided in the indenture, receive in exchange coupon bonds of this issue for an amount aggregating $1,000 in denominations of $.............. of numbers not contemporaneously outstanding."

For coupon bonds of smaller denominations exchangeable for a $500 or a $1,000 coupon bond:

"The holder of this bond may, at his option, on surrender and cancellation of this bond and others of the same issue aggregating $500 or $1,000 and on payment of charges, as provided in the indenture, receive in exchange a coupon bond of this issue of a number not contemporaneously outstanding, for the amount aggregated."

For registered bond(s) issued for coupon bond(s) of denomination(s) of less than $1,000:

"This bond is issued in exchange for coupon bond(s) of this issue numbered .... in denominations of $.......... not contemporaneously outstanding, aggregating the face value hereof and coupon bond(s) of this issue bearing the said number(s) and of the same denomination(s) will be issued in exchange for this bond upon surrender, cancellation and payment of charges provided in the indenture."

For registered bond(s) issued for $1,000 coupon bond(s):

"This bond is issued in exchange for coupon bond(s) of this issue numbered .... for $1,000 (each), not contemporaneously outstanding, and coupon bond(s) of this issue bearing the said number(s) will be issued in exchange for this bond upon surrender, cancellation and payment of charges provided in the indenture."

Stock

(In addition to the above General Requirements, the following apply specifically to stock certificates.)

The border and tint plate for one-hundred share certificates of stock shall have *said denomination engraved thereon in words and figures; the plates for smaller amounts shall bear some engraved device whereby the exact denomination of the certificate may be distinctly designated by perforation;* also conspicuously upon the face *"Certificate for less than one hundred shares."*

Certificates for every class of stock shall recite preferences of all classes.

Certificates of stock shall recite (1) ownership; (2) par value; (3) whether shares are *full* paid and (4) non-assessable; (5) preference as to dividends; (6) distribution of assets upon dissolution or merger; (7) terms of redemption; (8) convertibility; (9) voting power, or (10) other privilege; and (11) must bear the following legend:

This certificate is not valid until countersigned by the transfer agent, and registered by the registrar.

The following form is required upon the reverse of a certificate of stock:

For value received .... hereby sell, assign and transfer unto

....

.... shares

of the *capital stock represented by the within certificate and do hereby irrevocably constitute and appoint

.... attorney

to transfer the said stock on the books of the within named company with full power of substitution in the premises.

Dated........................19..........

....

In presence of

....

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate in every particular without alteration or enlargement, or any change whatever.

* *On certificates without nominal or par value the word "capital" may be omitted.*

Certificates of Deposit, Voting Trust Certificates, Etc.

In addition to the General Requirements above outlined, certificates of deposit and voting trust certificates must conform in every particular to the Specific Requirements as to stock certificates, except that the descriptive portion of a certificate of deposit may be typed satisfactorily to the Committee.

Temporary Certificates or Receipts

Temporary certificates or receipts must conform to the General Requirements above outlined and to the Specific Requirements as to stock certificates, except that the text may be typed satisfactorily to the Committee, and need not bear a vignette.

REMOVALS OR SUSPENSION IN DEALINGS OF LISTED SECURITIES

Whenever it shall appear that the outstanding amount of any security listed upon the Stock Exchange has become so reduced as to make inadvisable further dealings therein, the Committee may direct that such security be removed from the list and further dealings therein prohibited.

"The Governing Committee may suspend dealings in the securities of any corporation previously admitted to quotation upon the Exchange, or it may summarily remove any securities from the list."

E. V. D. COX, *Secretary* ROBERT GIBSON, *Chairman.*

AMENDED SCHEDULE

Applications must be accompanied by the required papers and agreements and by a check to be drawn to the order of "Treasurer, New York Stock Exchange" for a fee in accordance with the following schedule, such fee being computed separately for each class of security included in an application. In addition to such fees, companies making application are required to pay cost of printing. Printer's bills will be submitted directly to the applicant.

BASIC FEES

The basic fee for listing stock or securities arising out of stock, such as Certificates of Deposit for stock, Interim Certificates for Stock, Allotment Certificates for Stock, Voting Trust Certificates, etc., shall be, in the case of certificates having either no par value or a par value of $100 or less, one and two-tenths cents (1.2c) per share, any fraction of ten thousand (10,000) shares, over and above a multiple thereof, to be counted as ten thousand shares for this purpose. The basic fee for listing bonds, debentures, notes and similar instruments having a face value and not being issued in denominations of less than $100 shall be one hundred and twenty dollars ($120.00) per million dollars ($1,000,000) face value or fraction thereof.

In any case, where a fee is to be charged, whether at the basic rate or at a modified rate, the minimum fee will be $120.00.

The full basic fee will be charged in all cases, unless otherwise herein stated.

MODIFICATIONS OF BASIC FEES

1. In cases where, after an initial listing, a change is involved between par and no par in either direction, or is in the amount of the par value of the security, or represents a greater or smaller number of shares of no par stock involving the cessation of trading in no-par stock theretofore listed (as distinguished from a stock dividend in which the old stock continues to be traded in); the fee for such number of the substituted shares to be listed as is not in excess of the number of shares to be stricken from the list shall be one-fourth of the basic fee. For all shares, so issued, in excess of the number of shares to be stricken from the list, the full basic fee will be charged.

2. Where there is a change in the classification or name of a stock, without alteration of any preferences which it may bear, such as from Capital to Common, or vice versa, and without alteration in the number of shares, one-fourth of the basic fee will be charged. When, however, the change of name of a stock having a preference involves also the giving of a higher or lower preference to the stock, the full basic fee will be charged.

3. Where the change is in the nature of an extension of a time limit, as in the case of an extended voting trust, the number of shares listed not being increased, one-fourth of the basic fee will be charged.

4. Where the change is from *listed* stocks or bonds to Certificates of Deposit, whether or not a reorganization of the listed company is involved, one-fourth of the basic fee will be charged.

5. When the change is from Certificates of Deposit to stock or bonds:

(*a*) If such stock or bonds are identical with formerly listed securities, for which such certificates of deposit were issued, no fee will be charged up to the number of shares so formerly listed For additional shares, the full basic fee will be charged.

(*b*) Where the certificates of deposit have been listed first and are thereafter replaced by the securities initially deposited, one-fourth of the basic fee will be charged for listing such securities.

(*c*) If such stock or bonds represent securities issued under a reorganization. or in any other respect differ from the securities for which such Certificates of Deposit were originally issued, the full basic fee will be charged, whether or not the securities were listed for which the Certificates of Deposit were originally issued.

6. Where voting trust or stock trust certificates are issued in exchange for listed stock of the same company, one-fourth the basic fee will be charged.

7. When voting trusts or stock trusts terminate and where the stock replacing them is identical with formerly listed stock for which such voting or stock trust certificates were issued, there will be no fee up to the number of shares so formerly listed. For additional shares, the full basic fee will be charged. If, however, the stock replacing such certificates was not formerly listed, one-fourth the basic fee will be charged.

8. Where the name of a corporation is changed, without reorganization, merger or other change in its corporate structure, the fee will be one-fourth of the basic fee. If, however, a reorganization or merger resulting in a new corporation is involved, the full basic fee will be charged. When the corporation changing its name simultaneously acquires the stock or property of another corporation only the additional stock issued therefor, together with any additional number of shares otherwise issued, is subject to the full basic fee.

9. In the case of a stock dividend, the additional stock issued is subject to the full basic fee. There is no additional fee as to the old stock.

QUESTIONNAIRE

.................................192....

1—Are you an officer of the Company?..................................

2—Do you appear as representative of the applicant company for the listing of ....

3—Is the application made by action of the Stockholders, Board of Directors or Executive Committee?..

4—Is there any syndicate or concentrated holdings of this security?..........

5—Is there any restraint on any portion of the security?..................

6—Is the control of the property vested in any minority holding?...........

7—Have any dividends been declared and not paid subsequent to date of the present application? ....

8—Have any rights to subscribe to new securities been offered to stockholders which remain unsettled to date of application?..........................

9—Are the transfer books to be closed or a record of stockholders to be taken in the near future for any purpose?...................................

10—How frequently do you make reports to shareholders?..................

11—The Committee desires publication of quarterly statements of earnings. Will you agree to do so?...

12—The Committee prefers that the transfer books of the Company do not close, but a record be taken. What is your practise?...................

13—So many corporations have adopted the 15th of December, March, June and September as their date of record of stockholders for the payment of dividends that the resulting congestion is serious. The Committee, accordingly, desires that you should adopt some other dates of record for that purpose. Will you agree to do so?....................................

14—Does the foregoing agreement involve any change in your present practise? ....

15—If so, please name a date by which you expect the change agreed to to become effective ....

16—The Committee desires it understood that all future financial statements of the Company published for the benefit of stockholders are to be in the form contained in the listing application. Will you so agree?...........

....

17—When and by whom was the last audit of your books prepared?..........

....

18—Will you make a copy of this audit available for the Committee on request?

....

19—Have any other reports of a financial, accounting, or engineering nature been made either on your behalf or on behalf of any banker or underwriting or banking group within the past three years? If so, please indicate the character of these reports and state whether they will be made available for the inspection of this Committee upon request.................

....

20—Is there any litigation, pending or threatened that would affect the Company's source of income from, title to, or possession of any of its property?

....

21—Has there been any change in your Charter or By-Laws since previous filing with the Committee?.......................................

22—In its application the Company agrees to maintain a transfer office and a registry office in the Borough of Manhattan. The Committee desires in order to facilitate business, that such offices be maintained south of Chambers Street in said Borough? Will you so agree?.....................

....

23—The Committee in order to facilitate the business of the Exchange desires that the transfer agent of your company be directed to sign the Stock Transfer Department receipts for all stock submitted by the Stock Clearing Corporation for transfer. Will you so agree?......................

....

24—What provisions have you in effect for replacing lost stock certificates?....

....

25—Are there any present provisions in your Charter or By-Laws preventing issuance of new certificates forthwith upon notification of loss and receipt of proper indemnity? ....

26—If there are any such provisions, will you agree to such changes in the charter or by-laws as may be necessary to permit issuance forthwith of new certificates upon notification of loss and receipt of proper indemnity?

....

27—If nothing in your present Charter or By-Laws forbids, will you agree to issue new certificates replacing lost ones forthwith upon notification of loss and receipt of proper indemnity?.................................

28—Will you agree that all calls for redemption (Foreign Bonds) published abroad will be published on the same day or days in a newspaper of general circulation published in the Borough of Manhattan, City of New York? ....

29—Do you desire additional copies of the application, at your expense, if the Committee acts favorably upon application? If so, how many?..........

30—In the event any additional papers should be filed, will the same be furnished on request?...

....

....

By..............................

TO BE MADE PART OF APPLICATIONS WHERE APPLICABLE

AGREEMENTS

....................agrees with the New York Stock Exchange as follows:

Not to dispose of an integral asset or its stock interest in any constituent, subsidiary, owned or controlled company, or allow any of said constituent, subsidiary, owned or controlled companies to dispose of an integral asset or stock interest in other companies unless for retirement and cancellation, without notice to the Stock Exchange.

To publish statement of earnings quarterly.

To publish once in each year and submit to the stockholders, at least fifteen days in advance of the annual meeting of the Corporation, a statement of its financial condition, a consolidated income account covering the previous fiscal year; and a consolidated balance sheet showing assets and liabilities at the end of the year; or an income account and balance sheet of the parent company and of all constituent, subsidiary, owned or controlled companies.

To maintain, in accordance with the rules of the Stock Exchange, a transfer office or agency in the Borough of Manhattan, City of New York, where all listed securities shall be directly transferable, and the principal of all listed securities with interest or dividends thereon shall be payable; also a registry office in the Borough of Manhattan, City of New York, other than its transfer office or agency in said city, where all listed securities shall be registered.

To notify the Stock Exchange thirty days in advance of the effective date of any change in the authorized amounts of listed securities.

Not to make any change in listed securities, of a transfer agency or of a registrar of its stock, or of a trustee of its bonds or other securities, without the approval of the Committee on Stock List, and not to select as a trustee an officer or director of the Company.

To notify the Stock Exchange in the event of the issuance or creation in any form or manner of any rights to subscribe to, or to be allotted, its securities, or of any other rights or benefits pertaining to ownership in its securities, so as to afford the holders of its securities a proper period within which to record their interests, and that all rights to subscribe or to receive allotments and all other such rights and benefits shall be transferable; and shall be transferable, payable and deliverable in the Borough of Manhattan, City of New York.

To make application to the Stock Exchange for the listing of additional amounts of listed securities prior to the issuance thereof.

To publish promptly to holders of bonds and stocks any action in respect to interest on bonds, dividends on shares, or allotment of rights for subscription to securities, notices thereof to be sent to the Stock Exchange, and to give to the Stock Exchange at least ten days' notice in advance of the closing of the transfer books or extensions, or the taking of a record of holders for any purpose.

To redeem Preferred Stock in accordance with the requirements.

To notify the Stock Exchange if deposited collateral is changed or removed.

To have on hand at all times a sufficient supply of certificates to meet the demands for transfer.

....

By..................................

THE TEN CARDINAL RULES OF CUSTOMER OWNERSHIP

PREPARED BY THE CUSTOMER OWNERSHIP COMMITTEE OF THE NATIONAL ELECTRIC LIGHT ASSOCIATION[1]

"All member companies are again most urgently advised to review these principles and the discussion of each of them as reported by your previous committees, and to see that all of these principles are carefully followed in all customer ownership effort.

"In order to bring each of these principles clearly to mind again, these ten cardinal rules of customer ownership, distinguishing this from other forms of financing, are as follows:

1. "The sale of the securities must be direct from company to customer, or through an agency expressly created for the purpose and controlled by the company.
2. "The safety of the securities offered must be amply protected by property and earnings.
3. "A minimum rate of dividends must be provided for in so far as honest judgment based on experience can foresee.
4. "A reliable resale market must be maintained in some manner so that shareholders who wish to dispose of their holdings can do so promptly at nominal expense.
5. "A partial payment purchase plan must be operative in order to give every customer who can save a small amount monthly full opportunity to become a shareholder and to encourage thrift.
6. "The proprietary interest and responsibility of shareholders must be emphasized and the shareholders supplied regularly with information regarding their company and its affairs.
7. "Loss of capital by shareholders in hazardous and fraudulent offerings from various sources must be guarded against by the rendering of authentic information and advice to shareholders.
8. "The number of shareholders must be increased steadily, and efforts should be made to avoid large individual accumulations of stock.
9. "Employees must be carefully instructed in order that all representations made to customers or others are in line with the facts.

[1] Presented and discussed at the 50th Convention at Atlantic City, June, 1927.

10. "Managements must realize that customer ownership multiplies their obligations to the public and intensifies the trust reposed in them. It does not replace the constant striving for higher efficiency, good service, reasonable rates, courtesy and progressive public relations policies."

Beginning with 1928 customer ownership campaigns are being conducted in close cooperation with the National Better Business Bureau, Inc.

DISSIMILARITY OF PUBLISHED INCOME STATEMENTS

Among the income statements published only a few years ago by well known industrial concerns, the following selected at random may indicate to the student the wide diversity of practise prevailing:

AMERICAN GLUE COMPANY

Net after charges.
Depreciation.
Plant additions reported.
Reduction in inventory.
Bad debts, etc.
Interest on notes.
Net income.
Total net.
Federal income and profits taxes.
Appraised insurance reserve.
Employee fund.
Cash dividends.
Balance to surplus.
Less premiums.
Less stock dividends.
Surplus December 31st.

BALDWIN LOCOMOTIVE COMPANY

Sales.
Cost of sales.
Manufacturing profit.
Other income.
Gross profits.
Deduction of other expenses, etc.
Profit.
Less reserves for depreciation.
Income taxes.
Deferred profits.
Net profit.
Dividend on preferred stock.
Dividend on common stock.
Surplus.

GREENFIELD TAP AND DIE CORPORATION

Gross sales.
Earnings before depreciation.
Earnings after depreciation and taxes.
Preferred dividends.
Available for common dividends and surplus.

INTERNATIONAL CEMENT CORPORATION

Net sales.
Cost of sales.
Selling, administrative and general expenses.
Net from operation.
Other income.
Total income.
Interest.
Taxes.
Exchange, etc.
Net income.

INTERNATIONAL PAPER COMPANY

Total revenue.
Total deductions.
Net revenue.
Preferred dividends.
Surplus.
Previous surplus.
Total surplus.

KELLY SPRINGFIELD TIRE COMPANY

Gross profit.
Operating income
Other income.
Total income.
Interest, etc.
Profit sharing.
Invested depreciation.
First preferred sinking fund.
Net income.
Preferred dividends.
Balance for common.
Common dividends.
Surplus.
Previous surplus.
Total surplus.
Stock dividend on common.
Taxes.
Additions (net).
Surplus December 31st.

TABLE 82

Analysis of Balance Sheets of 359,449 Corporations, 1926

(Value Unit: $1,000,000)

Item	Aggregate		Agriculture and Related Industries		Mining and Quarrying		MANUFACTURING			
							Total		Food Products Beverages and Tobacco	
	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities
Assets:										
Cash	$16,802	6.72	$47	2.3	$409	3.4	$3,528	5.5	$454	5.1
Notes Receivable	6,725	2.69	70	3.4	152	1.3	1,689	2.6	129	1.4
Accounts Receivable (less Reserve for Bad Debts)	16,826	6.73	122	6.0	610	5.0	6,878	10.6	869	9.8
Inventory	20,939	8.37	118	5.7	636	5.2	12,284	19.0	1,709	19.2
Current Assets	$61,292	24.50	$357	17.4	$1,807	14.9	$24,378	37.7	$3,160	35.6
Tax Exempt Securities	8,694	3.48	16	0.8	298	2.5	1,822	2.8	168	1.9
Real Estate, Buildings and Equipment	97,523	38.98	1,242	60.6	7,967	65.5	26,619	41.1	3,322	37.4
Miscellaneous	82,669	33.04	434	21.2	2,099	17.2	11,908	18.4	2,234	25.1
Total Assets	$250,179	.....	$2,050	.....	$12,172	.....	$64,727	.....	$8,884	.....
Liabilities:										
Notes Payable	$13,204	5.28	$292	14.2	$443	3.6	$4,024	6.2	$704	7.9
Accounts Payable	10,838	4.33	115	5.6	459	3.8	3,192	4.9	389	4.4
Current Liabilities	$24,042	9.61	$407	19.8	$902	7.4	$7,216	11.1	$1,092	12.3
Bonded Debts and Mortgages	$21,801	8.71	$114	5.6	$1,008	8.3	$4,340	6.7	$722	8.1
Miscellaneous	85,076	34.01	247	12.1	1,910	15.7	6,898	10.7	1,012	11.4
Preferred Stock	17,146	6.85	97	4.7	538	4.4	7,431	11.5	1,275	14.4
Common Stock	67,517	26.99	974	47.5	6,176	50.7	23,980	37.0	3,193	35.9
Total Capital Stock	$84,663	33.84	$1,071	52.2	$6,714	55.2	$31,412	48.5	$4,468	50.3
Net Surplus	$34,597	13.83	$210	10.3	$1,638	13.5	$14,862	23.0	$1,590	17.9
Invested Capital	141,061	56.38	1,396	68.1	9,360	76.9	50,613	78.2	6,780	76.3
Total Liabilities	$250,179	.....	$2,050	.....	$12,172	.....	$64,727	.....	$8,884	.....
Net Current Assets	$37,250	14.89	$-49	-2.4	$905	7.4	$17,162	26.5	$2,067	23.3
Net Worth	119,260	47.67	1,282	62.5	8,352	68.6	46,274	71.5	6,058	68.2
Debt—Funded and Floating	45,843	18.32	521	25.4	1,910	15.7	11,556	17.9	1,814	20.4

Item	MANUFACTURING									
	Textiles and Textile Products		Leather and Leather Products		Rubber and Rubber Goods		Lumber and Wood Products		Paper, Pulp and Products	
	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities
Assets:										
Cash	$375	6.0	$76	6.2	$67	4.9	$142	3.5	$84	4.0
Notes Receivable	76	1.2	20	1.6	16	1.1	127	3.1	31	1.5
Accounts Receivable (less Reserve for Bad Debts)	980	15.6	242	19.7	205	14.9	483	12.0	228	10.9
Inventory	1,762	28.1	398	32.4	342	24.8	770	19.1	298	14.2
Current Assets	$3,192	51.0	$736	60.0	$630	45.8	$1,522	37.8	$641	30.6
Tax Exempt Securities	157	2.5	23	1.9	12	0.8	76	1.9	39	1.8
Real Estate, Buildings and Equipment	2,269	36.2	296	24.1	551	40.0	1,854	46.1	999	47.6
Miscellaneous	642	10.3	172	14.0	184	13.3	572	14.2	418	20.0
Total Assets	$6,260	.....	$1,227	.....	$1,376	.....	$4,023	.....	$2,097	.....
Liabilities:										
Notes Payable	$624	10.0	$121	9.8	$61	4.4	$441	11.9	$94	4.5
Accounts Payable	454	7.3	89	7.2	98	7.1	251	6.2	96	4.6
Current Liabilities	$1,078	17.2	$209	17.0	$159	11.5	$692	17.2	$190	9.0
Bonded Debts and Mortgages	$196	3.0	$18	1.5	$240	17.4	$160	4.0	$253	12.0
Miscellaneous	591	9.4	132	10.7	125	9.1	462	11.5	211	10.0
Preferred Stock	798	12.8	219	17.9	279	20.3	285	7.1	223	10.6
Common Stock	2,381	38.0	491	40.0	386	28.1	1,378	34.2	757	36.0
Total Capital Stock	$3,179	50.8	$710	57.9	$665	48.3	$1,663	41.3	$980	46.7
Net Surplus	$1,218	19.4	$158	12.9	$187	13.6	$1,047	26.0	$464	22.1
Invested Capital	4,590	73.3	885	72.2	1,093	79.4	2,870	71.3	1,697	80.9
Total Liabilities	$6,260	.....	$1,227	.....	$1,376	.....	$4,023	.....	$2,087	.....
Net Current Assets	$2,114	33.8	$527	43.0	$471	34.2	$830	20.6	$451	21.5
Net Worth	4,397	70.2	868	70.7	853	62.0	2,710	67.3	1,444	68.8
Debt—Funded and Floating	1,272	20.3	227	18.5	399	29.0	852	21.2	443	21.1

Item	MANUFACTURING									
	Printing and Publishing		Chemicals and Allied Substances		Stone, Clay and Glass Products		Metal and Metal Products		All Other Manufacturing	
	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities
Assets:										
Cash	$120	5.0	$492	4.0	$108	4.8	$1,478	7.0	$128	4.7
Notes Receivable	46	1.9	291	2.4	39	1.7	822	3.9	94	3.4
Accounts Receivable (less Reserve for Bad Debts)	326	13.7	772	6.3	211	9.4	2,123	10.0	439	15.9
Inventory	204	8.6	1,846	15.0	311	13.9	4,051	19.1	593	21.5
Current Assets	$696	29.2	$3,402	27.8	$669	29.9	$8,475	39.9	$1,256	45.5
Tax Exempt Securities	86	3.6	282	2.3	86	3.8	802	3.8	91	3.3
Real Estate, Buildings and Equipment	782	32.8	5,371	43.8	1,157	51.7	9,155	43.1	863	31.3
Miscellaneous	819	34.3	3,203	26.1	325	14.5	2,791	13.2	548	19.9
Total Assets	$2,384	.....	$12,258	.....	$2,237	.....	$21,223	.....	$2,759	.....
Liabilities:										
Notes Payable	$183	7.7	$391	3.1	$107	4.8	$1,102	5.2	$197	7.2
Accounts Payable	158	6.6	489	4.0	91	4.1	916	4.3	162	5.9
Current Liabilities	$340	14.3	$880	7.1	$198	8.9	$2,019	9.5	$359	13.0
Bonded Debts and Mortgages	$175	7.3	$800	6.5	$99	4.4	$1,578	7.4	$101	3.7
Miscellaneous	359	15.0	1,488	12.1	258	11.5	1,971	9.3	289	10.5
Preferred Stock	184	7.7	1,132	9.2	259	11.6	2,476	11.7	302	10.9
Common Stock	756	31.7	5,191	42.4	907	40.6	7,463	35.2	1,076	39.0
Total Capital Stock	$940	39.4	$6,323	51.6	$1,166	52.1	$9,939	46.8	$1,378	49.9
Net Surplus	$970	23.9	$2,767	22.6	$517	23.1	$5,715	26.9	$631	22.9
Invested Capital	1,684	70.6	9,890	80.7	1,781	79.6	17,232	81.2	2,110	76.5
Total Liabilities	$2,384	.....	$12,258	.....	$2,237	.....	$21,223	.....	$2,759	.....
Net Current Assets	$356	14.9	$2,522	20.6	$470	21.1	$6,456	30.4	$897	32.5
Net Worth	1,509	63.3	9,090	74.1	1,682	75.2	15,655	73.8	2,008	72.8
Debt—Funded and Floating	515	21.6	1,680	13.7	297	13.3	3,597	17.0	461	16.7

Item	Construction		Transportation and Other Pub. Utilities		Trade		Service—Professional, Amusements Hotels, Etc.		Finance—Banking, Insur., Real Estate and Holding Co.'s Stockbrokers		Nominal Concerns—Nature of Business Not Given	
	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities	Amount	Per Cent of Total Assets or Liabilities
Assets:												
Cash	$213	9.0	$1,358	2.4	$1,164	6.1	$300	6.2	$9,777	11.2	$6	3.9
Notes Receivable	99	4.2	297	0.5	835	4.4	94	1.9	3,478	4.0	10	6.4
Accounts Receivable (less Reserve for Bad Debts)	570	24.2	1,231	2.2	4,797	25.1	290	6.0	2,312	2.6	16	10.2
Inventory	273	11.6	942	1.6	5,569	29.1	184	3.8	923	1.1	11	6.7
Current Assets	$1,155	49.0	$3,828	6.7	$12,365	64.6	$868	17.8	$16,491	18.9	$43	27.1
Tax Exempt Securities	48	2.0	285	0.5	357	1.9	42	0.9	5,823	6.7	2	1.5
Real Estate, Buildings and Equipment	654	27.7	40,699	71.1	4,079	21.3	2,783	57.1	13,429	15.4	51	31.9
Miscellaneous	501	21.3	12,433	21.7	2,339	12.2	1,180	24.2	51,709	59.1	63	39.5
Total Assets	$2,358	.....	$57,245	.....	$19,140	.....	$4,873	.....	$87,452	.....	$160	.....
Liabilities:												
Notes Payable	$291	12.3	$1,139	2.0	$2,574	13.5	$523	10.7	$3,900	4.5	$18	11.5
Accounts Payable	354	15.0	1,198	2.1	2,422	12.7	298	6.1	2,781	3.2	17	10.5
Current Liabilities	$645	27.4	$2,337	4.1	$4,997	26.1	$821	16.8	$6,682	7.6	$35	22.0
Bonded Debts and Mortgages	$233	9.9	$9,931	17.4	$584	3.0	$842	17.3	$4,740	5.4	$10	6.0
Miscellaneous	524	22.2	18,466	32.3	1,501	7.8	651	13.4	54,862	62.7	16	10.1
Preferred Stock	85	3.6	4,855	8.5	1,722	9.0	447	9.2	1,956	2.2	16	10.2
Common Stock	554	23.5	15,611	27.3	6,836	35.7	1,516	31.1	11,777	13.5	91	56.7
Total Capital Stock	$639	27.1	$20,466	35.8	$8,558	44.7	$1,963	40.3	$13,733	15.7	$107	66.9
Net Surplus	$317	13.5	$6,045	10.6	$3,502	18.3	$596	12.2	$7,436	8.5	$-8	-5.0
Invested Capital	1,189	50.4	36,442	63.7	12,643	66.1	3,401	69.8	25,908	29.6	109	67.9
Total Liabilities	$2,358	.....	$57,245	.....	$19,140	.....	$4,873	.....	$87,452	.....	$160	.....
Net Current Assets	$510	21.6	$1,491	2.6	$7,368	38.5	$ 47	1.0	$9,809	11.2	$8	5.2
Net Worth	956	40.5	26,511	46.3	12,059	63.0	2,559	52.5	21,168	24.2	99	61.9
Debt—Funded and Floating	878	37.2	12,269	21.4	5,580	29.2	1,663	34.1	11,422	13.0	45	27.9

LEE RUBBER AND TIRE COMPANY

Net sales.
Cost of goods.
Operating profit.
Other income.
Total income.
Federal income taxes, etc.
Net profit.
Dividends.
Surplus.

OWENS BOTTLE COMPANY

Manufacturing profits.
Royalties, etc.
Total income.
Operating expenses.
Net earnings.
Net earnings of subsidiaries.
Total net.
Federal taxes.
Net profit.

STUDEBAKER CORPORATION

Net sales.
Manufacturing costs, etc.
Operating profit.
Other income.
Total income.
Interest, etc.
Federal taxes.
Net profit.
Preferred dividends.
Common dividends.
Surplus for the year.

WORTHINGTON PUMP AND MACHINERY CORPORATION

Billings.
Costs, etc.
Profit from manufacturing.
Other income, etc.
Gross income.
Interest.
Adjustment and inventory.
Federal tax reserve.
Net income.
Preferred dividends.
Common dividends.
Surplus.
Previous surplus.
Total surplus.
Transferred to reserves.
Profit and loss surplus.

TABLE 83

Earning Statistics of Industrial Groups

Group No.	Industrial Group	1925				
		No. of Companies Included	Average Total Investment (a)	Per Cent Return on Investment	Earned Per $100 Share of Common Stock	Per Cent Earned on Book Value of Common Stock
1	Agricultural Implements	5	$357,105,027	7.56	$10.95	7.71
2	Cotton, Silk and Woolen Goods:					
	A. Apparel	13	151,808,672	9.36	16.85	10.05
	B. Cotton and Cotton Goods	6	133,177,093	1.64	* .58	* .47
	C. Silk and Rayon	7	60,684,461	4.80	5.88	3.09
	D. Wool and Woolen Goods	5	200,492,816	1.26	* 3.91	* 2.86
3	Automobiles and Trucks	20	1,049,589,144	22.39	42.16	26.96
4	Automobile Parts and Accessories	20	240,850,920	19.64	36.17	21.55
5	Automobile Tires, Rubber Goods, etc.	12	774,173,781	11.51	29.72	15.94
6	Building and Related Lines:					
	A. Cement	5	86,262,693	10.57	14.88	11.88
	B. Equipment, Supplies and Construction	32	789,434,567	12.81	21.78	14.52
7	Chemicals (Industrial)	14	593,730,569	11.29	27.58	12.14
8	Coal and Coke:					
	A. Anthracite	2	119,292,450	3.50	5.31	2.62
	B. Bituminous	9	449,267,435	1.12	* 1.97	* .75
9	Copper and Brass	15	1,075,900,939	5.46	8.73	5.25
10	Electrical Equipment	4	538,217,906	11.57	18.39	12.21
11	Food Products (Other than Meat):					
	A. Baking Products and Flour:					
	1. Milling	4	75,790,723	8.41	13.59	8.59
	2. Biscuit	......	....	......	......	......
	3. Bread	......	....	......	......	......
	B. Dairy Products	6	112,614,884	15.07	29.12	19.39
	C. Miscellaneous	10	272,959,561	14.51	25.48	15.96
12	Household Products, Furniture and Supplies	12	226,518,739	15.78	33.17	19.04
13	Lead and Zinc	9	221,222,009	11.90	30.29	13.30
14	Leather and Shoes:					
	A. Leather	7	82,162,575	4.09	* 2.33	* 2.06
	B. Shoes	8	158,287,676	13.12	17.39	14.58
15	Machinery and Machine Equipment	14	317,508,644	8.10	15.42	8.34
16	Meat Packing	3	499,668,682	6.41	5.63	3.68
17	Mining and Smelting (Miscellaneous)	13	466,591,623	9.58	15.17	11.04
18	Miscellaneous Securities:					
	A. Drugs, Medicines, Cosmetics, etc.	1	2,520,584	14.53	38.93	19.39
	B. Can Companies	2	39,414,324	15.14	20.84	16.49
	C. Manufacturing	18	525,471,392	10.48	19.63	12.58
	D. Service (Express, etc.)	8	213,951,786	10.56	14.75	11.71
19	Office and Business Equipment	7	141,536,214	12.83	24.38	14.46
20	Oil Producing and Refining	40	5,059,925,437	11.32	17.76	12.01
21	Paper and Paper Products	10	308,512,151	7.59	12.56	8.37
22	Radio, Phonograph and Musical Instruments:					
	A. Phonograph and Musical Instruments	5	100,079,913	* 1.65	* 4.23	* 3.46
	B. Radio	2	40,047,828	7.69	12.26	8.36
23	Railroads	34	13,693,604,285	5.72	10.61	6.72
24	Railroad Equipment	12	717,672,335	6.25	9.71	6.02
25	Mail Order	4	232,547,385	15.84	25.64	16.67
26	Shipping and Shipbuilding	3	203,996,825	* .19	* 7.97	* 5.86
27	Steel and Iron	23	3,935,238,357	5.71	10.38	5.36
28	Pipe (Cast Iron)	4	53,615,622	14.36	36.14	17.51
29	Sugar Producing and Refining	14	612,976,236	4.83	5.00	2.95
30	Theatres, Motion Pictures, etc.	8	269,524,048	8.82	21.58	10.68
31	Tobacco and Tobacco Products	5	174,888,623	18.55	32.05	20.33
32	Utilities—Electric, Gas, Water, etc.:					
	A. Holding Companies	6	893,219,292	7.64	20.78	12.75
	B. Operating Companies	15	1,719,610,055	6.93	11.15	9.28
33	Utilities—Telephone and Telegraph	......	....	......	......	......
34	Utilities—Traction, Transportation, etc.	3	165,318,977	5.28	4.99	4.68
	Total	479	$38,156,985,258	8.02	$15.20	9.56

*Loss. (a) Average as of beginning and end of year of Capital Stock, Funded Debt and Surplus.

TABLE 83 (*Continued*)

Earning Statistics of Industrial Groups[1]

1926					1927					
No. of Companies Included	Average Total Investment (a)	Per Cent Return on Investment	Earned Per $100 Share of Common Stock	Per Cent Earned on Book Value of Common Stock	No. of Companies Included	Average Total Investment (a)	Per Cent Return on Investment	Earned Per $100 Share of Common Stock	Per Cent Earned on Book Value of Common Stock	Group No.
5	$369,605,265	9.53	$15.89	10.14	5	$385,956,045	9.24	$17.28	10.10	1
										2
14	162,477,171	9.11	17.61	10.02	15	178,850,595	9.63	17.65	10.23	
7	146,181,752	1.67	* 1.84	* 1.58	7	148,864,015	5.95	7.12	5.81	
8	63,096,535	1.58	* 6.41	* 3.83	7	64,618,923	9.10	12.66	7.07	
5	199,960,873	.55	* 4.42	* 3.12	5	193,023,434	1.52	* 3.43	* 2.59	
21	1,323,155,255	23.01	43.71	27.18	24	1,518,352,059	22.24	40.48	25.65	3
23	263,598,865	16.65	31.73	17.67	25	310,030,001	11.36	22.17	12.00	4
12	827,708,417	5.97	6.49	3.39	14	824,440,678	8.62	22.06	10.07	5
										6
6	112,474,795	8.04	10.72	8.54	8	200,381,243	9.53	16.40	10.64	
33	856,994,588	11.55	19.49	12.86	35	938,053,421	9.94	16.83	10.89	
15	658,994,852	12.12	29.53	13.13	16	731,306,872	11.69	30.85	13.21	7
										8
2	118,538,253	8.41	20.28	10.00	3	214,331,758	1.10	* 2.31	* .71	
9	435,847,389	1.53	* .30	* .12	11	380,507,006	1.14	* 2.49	* 1.43	
15	1,156,583,337	5.43	9.33	5.60	18	1,373,291,879	6.96	13.28	7.20	9
4	560,189,602	12.01	20.40	12.93	5	570,978,652	11.83	19.65	12.82	10
										11
6	116,127,587	8.01	10.59	6.76	8	140,771,327	9.61	17.04	10.73	
.....	....	......	......	......	4	135,085,130	14.74	25.74	18.09	
.....	....	......	......	......	5	157,647,147	14.57	25.13	20.13	
7	163,121,986	15.56	30.51	19.69	8	194,554,556	13.69	24.52	15.54	
12	358,377,383	16.85	33.36	20.03	13	568,859,359	14.69	21.77	16.03	
13	254,552,720	14.74	31.36	17.29	15	293,179,817	13.12	26.28	14.44	12
9	226,986,865	12.47	32.25	13.93	9	187,699,085	8.49	14.46	8.60	13
										14
7	81,458,400	.80	* 9.11	* 7.70	8	111,662,028	5.48	3.61	3.52	
9	165,543,911	12.46	16.58	13.83	10	183,147,891	15.07	20.31	16.94	
14	333,546,927	10.03	18.92	10.64	16	451,702,110	8.19	14.00	8.60	15
3	499,540,873	5.66	3.38	2.19	6	881,365,016	4.08	1.15	.76	16
13	476,536,217	9.51	15.59	10.95	15	725,813,340	8.87	17.85	12.01	17
										18
3	13,508,415	27.91	49.55	32.83	12	136,486,410	22.85	30.73	23.22	
2	42,612,014	9.63	12.91	9.98	2	185,312,074	9.44	16.06	10.26	
18	543,613,878	11.10	20.74	13.34	23	691,826,752	11.75	21.18	14.42	
9	266,048,241	8.85	10.85	8.37	9	324,562,619	7.99	12.31	8.95	
7	143,551,651	14.17	19.45	14.50	8	209,855,403	13.55	20.22	15.43	19
43	5,921,480,792	10.98	18.22	11.61	45	6,647,062,523	5.10	7.69	4.96	20
10	389,189,578	5.60	8.53	5.53	11	488,982,511	5.62	7.49	5.33	21
										22
4	105,608,045	12.16	17.69	12.99	5	108,970,365	9.71	7.91	5.95	
2	40,784,927	11.70	24.47	16.11	7	64,794,931	13.64	24.52	17.38	
34	14,023,584,300	6.12	12.23	7.53	47	19,210,033,037	5.42	10.25	5.96	23
15	747,205,432	9.67	16.49	10.25	15	890,077,637	6.69	10.79	6.64	24
5	272,530,866	13.01	21.36	13.14	5	280,322,366	15.25	28.04	16.49	25
3	204,363,613	.34	* 6.58	* 4.96	10	322,428,948	3.69	2.44	1.94	26
23	4,027,629,349	6.73	14.09	7.01	23	4,083,046,269	5.20	8.58	4.48	27
4	55,345,651	13.39	34.62	15.91	4	55,098,747	9.00	21.13	9.72	28
16	632,931,094	4.30	2.45	1.51	17	660,077,313	4.46	3.34	2.03	29
9	339,762,221	8.96	19.73	10.67	14	472,684,940	8.01	13.82	8.89	30
5	178,016,646	19.14	35.05	20.47	16	754,125,615	13.21	24.54	15.86	31
										32
12	2,023,656,443	7.20	13.27	9.92	27	4,675,837,757	7.31	12.74	9.59	
17	2,131,854,643	7.53	11.78	9.77	23	3,695,550,372	7.78	13.95	10.36	
.....	....	......	......	......	4	2,184,955,257	8.64	11.63	9.33	33
4	212,283,988	4.68	3.45	3.22	16	1,079,272,321	5.05	5.10	4.29	34
517	$42,246,761,605	8.36	$16.22	10.02	658	$59,295,837,554	7.18	$12.92	8.16	

[1] From confidential sources.

TABLE 84

PERCENTAGE OF GROSS PROFITS FROM SALES TO GROSS SALES, 1922-1926[1]

Year	Aggregate	Agriculture and Related Industries	Mining and Quarrying	Manufacturing: Food Products, Beverages, and Tobacco	Manufacturing: Textiles and Textile Products	Manufacturing: Leather and Leather Products
1922	23.68	39.13	30.79	21.88	22.13	19.71
1923	23.86	28.27	35.37	21.29	20.64	16.72
1924	21.94	32.12	30.05	17.66	17.27	17.97
1925	20.52	32.50	30.84	17.15	18.00	18.20
1926	22.34	35.05	31.90	17.99	17.51	17.48

Year	Manufacturing—Continued					
	Rubber and Rubber Goods	Lumber and Wood Products	Paper, Pulp, and Products	Printing and Publishing	Chemicals and Allied Substances	Stone, Clay, and Glass Products
1922	25.57	27.68	24.93	38.33	28.93	30.99
1923	25.12	26.82	24.38	37.41	27.19	33.64
1924	25.87	24.30	23.95	37.01	28.09	33.42
1925	24.65	23.72	25.10	36.98	29.63	32.71
1926	18.51	23.25	26.11	36.41	33.25	33.18

Year	Manufacturing—Continued			Construction	Trade
	Metal and Metal Products	All Other Manufacturing Industries	Total Manufacturing		
1922	28.44	30.23	26.28	14.41	19.10
1923	29.63	29.71	26.14	15.82	19.33
1924	26.14	29.07	23.54	17.79	18.62
1925	20.97	28.99	22.03	17.90	17.14
1926	27.80	29.79	24.74	17.99	17.78

[1] From *Statistics of Income*, 1926, page 15.

INDEX NUMBERS OF WAGES, 1840 TO 1926[1]

General Index of Hourly Wages

"In the Labor Review of February, 1921, an index of earnings per hour of wage earners generally was given for the period 1840 to 1920. In the preparation of that index number use was made of such wage data as were available for the various lines of employment, except that figures for agricultural labor were excluded.

"Frequent demand has been made for the continuation of this index down to a later year from persons who want to follow the trend of the broad field of wage rates rather than rates in specified industries and occupations.

"There never has been a wage-rate census in the United States. Satisfactory wage-rate data have been collected in many of the major industries, but there are other industries for which wage figures have not been compiled. However, while the information is not all inclusive, sufficient data are available to warrant continuation of the index down to 1926.

"The early part of 1920 was a period of great industrial activity and in this period employment and hourly earnings reached their highest point. A sharp downward trend of employment occurred in the latter part of the year. There was a great reduction in employment in the depressed year, 1921, accompanied, as might be expected, by a reduction in wage rates. The slump continued in 1922. As business conditions improved in 1923 there was a gain in wage rates which has been augmented each succeeding year."

TABLE 85

INDEX NUMBERS OF WAGES PER HOUR, 1840 TO 1926
(EXCLUSIVE OF AGRICULTURE)
(Currency basis during Civil War period. 1913 = 100)

Year	Index Number	Year	Index Number	Year	Index Number	Year	Index Number
1840	33	1862	41	1884	64	1906	85
1841	34	1863	44	1885	64	1907	89
1842	33	1864	50	1886	64	1908	89
1843	33	1865	58	1887	67	1909	90
1844	32	1866	61	1888	67	1910	93
1845	33	1867	63	1889	68	1911	95
1846	34	1868	65	1890	69	1912	97
1847	34	1869	66	1891	69	1913	100
1848	35	1870	67	1892	69	1914	102
1849	36	1871	68	1893	69	1915	103
1850	35	1872	69	1894	67	1916	111
1851	34	1873	69	1895	68	1917	128
1852	35	1874	67	1896	69	1918	162
1853	35	1875	67	1897	69	1919	184
1854	37	1876	64	1898	69	1920	234
1855	38	1877	61	1899	70	1921	218
1856	39	1878	60	1900	73	1922	208
1857	40	1879	59	1901	74	1923	217
1858	39	1880	60	1902	77	1924	223
1859	39	1881	62	1903	80	1925	226
1860	39	1882	63	1904	80	1926	229
1861	40	1883	64	1905	82		

[1] *Monthly Labor Review*, February, 1928, p. 332.

TABLE 86

Indexes of Gain in Efficiency of Industry[1]

(Data for manufactures refer to 1899, 1919, and 1927. Other data are averages for the periods 1898-1900, 1918-1920, and 1926-27)

1926–27 in relation to 1898–1900	Number of Workers		Indexes on Base, 1898–1900 = 100			Value of Output, 1898–1900, Used for Weighting (millions of dollars)
	1898–1900	1926–27	Number of Workers	Quantitative Output	Output per Worker	
Agriculture	10,700,000	10,500,000	98	155	157	3,500
Mining	600,000	1,050,000	176	379	215	600
Manufactures	5,300,000	9,880,000*	186½	279	149½	4,830
Rail transportation	975,000	1,865,000	191½	308	161	1,300
Total or average	17,575,000	23,295,000	132.5†	246‡ 208½§	185½ 157	10,230

1926–27 in relation to 1918–1920	Number of Workers		Indexes on Base, 1918–1920 = 100			Value of Output, 1918–1920, Used for Weighting (millions of dollars)
	1918–1920	1926–27	Number of Workers	Quantitative Output	Output per Worker	
Agriculture	11,300,000	10,500,000	93	118	127	15,700
Mining	1,050,000	1,050,000	100	138	138	3,175
Manufactures	10,675,000	9,725,000	91	130½	143	24,750
Rail transportation	2,035,000	1,865,000	91½	102½	112	4,725
Total or average	25,060,000	23,140,000	92.3†	124‡ 123§	134½ 133	48,350

[1]From the *Annual Report of the U. S. Secretary of Commerce*, 1928, page xxx.

*Estimated, including small plants formerly but not now covered by the returns; for this reason the figure is larger than that shown below for the same period.

†Actual change in number of workers.

‡Weighted by value.

§Weighted by workers.

TABLE 87

Ratios in Manufacturing Production, 1899-1927[1]

Census Year	Horse Power per Wage Earner	Product per Wage Earner		Index Numbers Base, 1914 = 100		
				Horse Power per Wage Earner	Product per Wage Earner	
		Actual Dollars	1914 Dollars		Actual Dollars	1914 Dollars
1899	2 11	$2,420	$2,992	66.6	69.9	86.4
1904	2.43	2,714	3,214	76.7	78.4	92.9
1909	2.80	3,146	3,470	88.3	90.9	100.3
1914	3.17	3,461	3,461	100.0	100.0	100.0
1919	3.24	6,868	3,395	102.2	198.4	98.1
1921	....	6,260	3,489	.....	180.9	100.8
1923	3.77	6,872	4,250	118.9	198.6	122.8
1925	4.27	7,480	4,681	134.7	216.1	135.2

[1]From *Conference Board Bulletin* for August 15, 1928, based on figures collected by United States Census Bureau

TABLE 88

Approximate Costs of Marketing Typical Commodities (1921)[1]

A. **One Dozen Oranges:**

Price to consumer		$ .75
Distributed as follows—		
Grower	23.0	
Harvesting, packing and selling paid by growers' exchange	8.8	
Transportation	16.2	
Transportation tax	.5	
Wholesaler	6.1	
Retailer	20.4	

B. **One Dollar Spent for Corn Flakes:**

Cost of production and manufacture		36.6
Producer receives	21.0	
Paid for transportation	5.9	
To elevator	1.6	
Cost of manufacture	8.1	
Cost of distribution		63.4
Manufacturer's cost of selling	7.3	
Advertising	4.5	
Transportation	9.1	
Taxes	7.0	
Profit	7.5	
Wholesaler's operating expense	7.0	
Profit	1.7	
Retailer's operating expense	13.3	
Profit	6.0	

C. **A $10 Pair of Shoes:**

Manufacturer receives		$ 7.17
Raw material	3.85	
Cost of manufacture	1.83	
Overhead and selling cost	1.09	
Profit	0.31	
Tax	0.09	
Retailer receives in addition		2.83
Expense of operation	2.50	
Profit	0.33	
Total		$10.00

D. **Percentage Distribution of the Consumer's Dollar Spent for Men's Ready to Wear Suits:**

Manufacturer receives			67.7%
Raw material		30.1	
Cloth	18.0		
Trimmings	12.1		
Cost of manufacture		19.8	
Operating, overhead and selling		12.8	
Profit		5.0	
Retailer receives			32.3%
Operating expense		22.7	
Profit		9.6	

[1]Most of these figures appeared in *The Nation's Business*, June, 1922, based on *Report* of Joint Commission of Agricultural Inquiry (U. S. Congress).

CENSUS OF DISTRIBUTION

The following tables are derived from the Census of Distribution conducted by the United States Census Bureau in cooperation with the Committee on Collection of Business Figures of the Chamber of Commerce of the United States. The data are for the year 1926, and cover the following cities and environs:

Atlanta	Providence
Baltimore	San Francisco
Denver	Seattle
Fargo	Springfield (Ill.)
Kansas City (Mo.)	Syracuse
Chicago	

TABLE 89

DATA ON RETAIL STORES IN 11 CITIES, 1926

Number of establishments		93,928
Independent	79,778 (84.9%)	
(Independent department	108)	
Chain	14,150 (15.1%)	
(Chain department	17)	
Population of cities		6,793,000
Number of inhabitants per store		72
Net sales		$4,224,109,100
Independent	$3,011,090,300 (71.3%)	
Specialty stores	2,598,172,100 (61.5%)	
Department	412,918,000 (9.8%)	
Chain	1,213,018,800 (28.7%)	
Chain department	203,571,500 (4.8%)	
Chain specialty	1,009,447,300 (23.9%)	
Total department	616,489,700 (14.6%)	
Sales per store (all stores)		$45,000
Independent specialty		$33,000
Chain specialty		$71,500
Independent department (108)		$3,823,300
Chain department (17)		$11,975,000
Sales per capita		$622
Sales per person engaged		$8,620
Inventory at cost (end of year)		$574,036,300
Turnover of Inventory (Ratio of Net Sales to Inventory at cost)		7.4
Number of persons engaged		489,635
Employees	398,718	
Proprietors, etc.	90,917	
Number per store		5.2
Salaries and wages of employees		$546,069,200
Average per employee		$1,370
Per cent of sales (excluding proprietors, etc.)		12.9%

TABLE 90

Independent Retail Stores Classified by Volume of Sales, 1926

Annual Sales	Number of Stores	Per Cent of Total	Aggregate Sales	Per Cent of Total
1. Less than $5,000	22,388	28.06	$ 50,611,500	1.68
2. 5,000 to 9,999	14,757	18.50	107,322,100	3.56
3. 10,000 to 24,999	22,409	28.09	349,759,800	11.62
4. 25,000 to 49,999	11,174	14.01	379,757,100	12.61
5. 50,000 to 99,999	5,184	6.50	352,392,900	11.70
6. 100,000 to 249,999	2,452	3.07	372,614,600	12.37
7. 250,000 to 499,999	839	1.05	292,500,800	9.71
8. 500,000 to 999,999	322	.40	217,943,300	7.24
9. 1,000,000 to 4,999,999	213	.27	393,865,400	13.08
10. 5,000,000 and over	40	.05	494,322,800	16.43
Total	79,778	100.00	$3,011,090,300	100.00

TABLE 91

How the Consumer's Dollar was Spent in 11 Cities, 1926

	Total Sales	Per Cent of Total
Total Retail Trade	$4,224,109,100	100.00
Food	1,204,096,400	28.51
Clothing	1,026,073,200	24.29
Automotive	511,254,100	12.10
Furniture and Housefurnishings	415,769,100	9.84
Building Materials and Heating Supplies	211,362,400	5.00
Drugs and Toilet Goods	140,651,400	3.33
Coal and Wood	84,945,300	2.01
Hardware, Tools and Machinery	84,039,500	1.99
Jewelry and Silverware	71,434,700	1.69
Cigars, Cigarettes and Tobacco	71,221,800	1.69
Office Equipment and Supplies	60,784,900	1.44
Musical Instruments and Radio	60,104,400	1.42
All Others	282,371,900	6.69

TABLE 92

Data on Wholesale Establishments in 11 Cities, 1926

Number of establishments		17,012
Number of persons employed		263,105
Employees	253,401	
Proprietors and firm members	10,704	
Number per store		15.5
Wages paid (excluding proprietors, etc.)		$499,867,100
Average per employee		$1,980
Per cent of total sales		5.17
Total sales		$9,671,680,000
Per store		$568,500
Per person engaged		$ 36,760
Inventory at end of year (at cost)		$651,959,300
Turnover (times per year)		14.8

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